REPORT RESUMES

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OUTCOMES OF INDIVIDUAL AND PROGRAMMATIC VARIATIONS AMONG PROJECT HEAD START CENTERS, SUMMER, 1965. FINAL REPORT.

BY- PIERCE-JONES, JOHN AND OTHERS
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A 15-MONTH EVALUATION RESEARCH STUDY OF THE 1965 SUMMER HEAD START PROGRAMS WAS CONDUCTED THROUGHOUT THE STATE OF TEXAS. A SCHEMATIC MODEL OF INTERACTING FACTORS OPERATING THROUGH HEAD START PROGRAMS TO PRODUCE AND PREDICT CHANGES IN EDUCATIONAL DEVELOPMENT AND IN OUT-OF-SCHOOL ENVIRONMENT WAS DEVELOPED. THIS MODEL GENERATED THE EMPIRICAL EVALUATION RESEARCH. IT WAS THOUGHT THAT VARIATIONS IN TEACHING BEHAVIOR PATTERNS WOULD HAVE AN EFFECT ON VARIOUS KINDS OF BEHAVIORAL CHANGES IN THE PUPILS. SEVENTY HEAD START CENTERS IN 40 COMMUNITIES WERE CHOSEN AND PRESUMED TO BE ADEQUATELY REPRESENTATIVE. A NEW RATING-SCALES DEVICE, THE OBSERVOR'S RATING FORM WAS DEVELOPED TO MEASURE THE CLASSROOM BEHAVIOR OF THE 1256 TEACHERS. TRAINED OBSERVER TEAMS MADE OBSERVATION VISITS TO THE CLASSROOMS. CHILDREN, RANDOMLY CHOSEN FROM THE CLASSROOMS, WERE TESTED BY QUALIFIED PSYCHOMETRISTS EARLY IN THE EIGHT-WEEK PROGRAM AND AGAIN LATE IN THE PROGRAM. TESTS ADMINISTERED WERE THE PEABODY PICTURE VOCABULARY TEST, THE SEQUIN FORM BOARD, HUBBARD'S GROUP ADAPTATION OF BENDER'S VISUAL MOTOR GESTALT TEST, AND CALDWELL'S PRESCHOOL ACHIEVEMENT INVENTORY. THE ONE SALIENT CONCLUSION DRAWN FROM THE REPORT IS THAT THE 1965 SUMMER HEAD START PROGRAM IN TEXAS CHANGED THE CHILDREN IN VARIABLE YET GENERALLY SIGNIFICANTLY PREDICTABLE WAYS SUCH AS IN SCHOOL READINESS. (MANY TABLES AND FORMS ARE INCLUDED.) (EF)

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By

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In Association With

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A Final Report Submitted to

The Office of Economic Opportunity,
Project Head Start

for

Contract No. OEO 508

September 30, 1966

PS000216

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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PREFACE

This final report presents the more salient results of some 15 months of evaluation research devoted to summer (1965) Project Head Start programs of compensatory education conducted throughout the State of Texas. The Personnel Services Research Center at The University of Texas has had the responsibility for this research under Office of Economic Opportunity Contract No. 508, which provided virtually all of the funds used in support of these studies. A relatively minor amount of staff time spent on this Project was contributed by PSRC from NIMH (Contract No. 1428) funds through the Interprofessional Research Commission on Pupil Personnel Services (IRCOPPS). The Commission, because of its primary interest in the prevention of learning and behavior difficulties in school children, was viewed by the Principal Investigator as legitimately involved in the present effort.

Among the unique features of the evaluation research presented in this document are (1) its proceeding from a highly general and comprehensive conceptual model of how programs of compensatory education most probably operate; (2) the explicit effort to measure most of the main construct variables utilized in the model; (3) the development of certain new and promising measuring devices, especially the Observer's Rating Form (ORF); and (4) the application of multiple linear regression methodology to the prediction problems which were among the foci of our studies.

While the results obtained in the Texas research seem, overall, to demonstrate both (1) that the Summer 1965 Head Start program did produce changes in children and (2) that such changes were relatively predictable rather than functions of chance, there is no basis in our results for knowing the degree to which later schooling and extra-school experience may moderate the changes produced by Head Start. What is sorely needed is a careful longitudinal study--through the elementary school years--of Head Start children and reasonably comparable children among their non-Head Start comperes. Only thus can enough be learned in detail about the persisting effects, if any, of compensatory preschool education; about the kinds of school programs and teacher behavior which may vitiate, sustain, or accelerate Head Start-based growth; and about extra-school factors in a child's family, peer society, community, and ethno-lingual subsociety which may interact complexly with school experience to influence his school progress, level of human competence, and ultimate alienation or integration into the "mainstream" of American culture. Time is of the essence in launching such studies.

The author of this Report wishes to express his sincere gratitude to all who have facilitated and made possible the work summarized in these pages, particularly Dr. Emma Lou Linn, who not only developed her Ph.D. dissertation from this Project's data, but accepted major responsibility for drafting the present Report.

Dr. Robert P. Boger's Ph.D. dissertation was also based on this evaluation of the Summer, 1965, Head Start Program. Additionally, Dr. Boger helped hugely in planning and organizing the program of statistical analyses required and in overseeing their completion. Dr. Bill S. Caldwell of the Child Development Clinic at The University of Texas Medical Branch, Galveston, developed the items for the Observer's Rating Form to measure dimensions of Head Start teachers' classroom activities in socially, psychologically, and educationally meaningful ways. Mr. Clinton Schuhmacher performed the necessary statistical analyses, and Mr. Donald E. Hood, presently Southwestern Representative of the Educational Testing Service of Princeton, New Jersey, assisted in numerous administrative ways.

Miss Barbara M. Moore, Professor of Social Work at the Jane Addams Graduate School of Social Work, University of Illinois, Chicago, served the Principal Investigator as critic and consultant on various conceptual aspects, always insisting that studies such as are reported in this document must be anchored in the realities of the disadvantaged child's experience. Drs. S. T. Friedman and W. W. E. Barron of The University of Texas, Austin, helped in various planning aspects of these studies.

Mrs. Martha Ann Coody, Mrs. Jerri Daniel, Mrs. Elizabeth Airth, Mrs. Dorotha Dyer, Mrs. Brenda Johnson, Mrs. Florence Bonner,

Miss Anne Pierce-Jones, Mrs. Laurel Chartier, and Miss Lydija Micpovil accepted heavy and demanding report production burdens gracefully.

Despite the aid of all the persons named above, the work could not have been done without the confidence and support of the Office of Research and Evaluation, Project Head Start, Washington, and of its Director, Dr. Edmund W. Gordon, to whom I am happy to acknowledge both my indebtedness and my gratitude.

So, while many persons have supported, facilitated, and enriched our work and thought, the present writer accepts full responsibility for this report, including its obvious shortcomings.

John Pierce-Jones

The University of Texas
Austin, Texas
October 15, 1966

TABLE OF CONTENTS

Chapter Page

I ORIENTATION, CONCEPTUAL MODEL AND DESCRIPTION OF INSTRUMENTS 1

Problem 4
A Conceptual Model 7
Data Collection 8
  Teacher Factors 8
  Measures of Cognitive Changes in children 14

II AN OBSERVER'S RATING FORM TO MEASURE HEAD START PROGRAM VARIATIONS AS VARIANCE IN PATTERNED TEACHING BEHAVIOR 27

Bases for Developing _ORF_ Items 28
Initial Factor Analytic Studies of the _ORF_ 31
  Results 32
  Discussion and Naming of Factors......... 32
Later Development of the _ORF_.,.............. 40

III STUDIES EMPLOYING THE OBSERVER'S RATING FORM FOR PREDICTING COGNITIVE CHANGES IN SUMMER, 1965, HEAD START CHILDREN 61

IV PREDICTING _ORF_-MEASURED TEACHER BEHAVIOR FROM SETS OF TEACHER CHARACTERISTICS AND PUPIL ATTRIBUTES 71

Is _ORF_-Measured Behavior Predictable from Pretest Measure of Children's Cognitive Attributes? 72
Predicting _ORF_-Measured Criterion Behavior from Teachers' Attitudes, Opinions, and Needs for Help 75

Chapter Page

V DESCRIPTIVE AND PREDICTION STUDIES OF COGNITIVE CHANGES IN SUMMER, 1965, HEAD START CHILDREN 79

  The Relationship of Intellectual Change to the Temporal Interval Between Testing and Retesting Pupils 79
    Method 80
    Results 81
    Discussion and Conclusions 83
  A Comparison Study of Head Start vs. non-Head Start Children 85
  Effects of Head Start Programs on the Test-Retest Variance Found Among Head Start Children 99
  Are Cognitive Changes in Head Start Children Related to Their Teachers' Background 119

VI PREDICTING ATTITUDES OF SUMMER 1965 HEAD START TEACHERS TOWARD PROJECT HEAD START AND ITS CHILDREN 124

  General Rationale 124
  Major Hypotheses 125
  Measuring Devices 126
  Methods of Analysis 126
  Attitudes of Optimism for and Acceptance of Head Start Program and Children 127
  Results and Interpretation 127
  Predicting Head Start Teachers' Relative Authoritarianism toward Children 137

VII PROJECT HEAD START: TEACHER INTEREST AND COMMITMENT 141

  Purposes and Methods 142
    Subjects 142
    Questionnaire 143

Chapter Page

Results 144
    Effects of Experience 144
    Motivation to Participate in
     Head Start 145
    Socio-Economic Background 145
    Ethnic Group Membership 146
Conclusions 146

VIII TEACHERS' OPINIONS OF THE EFFECTIVENESS OF PROJECT HEAD START, SUMMER 1965 150

Method 151
    Teachers' Survey Form (TSF)............... 151
    Subjects and Sampling 151
    Data 152
Results 152
    The Summer 1965 Head Start Program 153
    Nominations of Children by Teachers 153
    General Comparisons of Head Start
     with non-Head Start Children 156
    Teachers With and Without Head
     Start Experience 159
    Nominations of Children 159
    General Comparisons 160
Summary 163

IX SUMMARY, INTERPRETATIONS, AND DIRECTIONS FOR NEW RESEARCH.. 165

Results and Conclusions Summarized............. 170
Conclusions..................................... 174

REFERENCES...................................... 176

APPENDIX

LIST OF TABLES

Table Page

1 INTERCORRELATIONS AMONG SCALES OF CALDWELL _PRESCHOOL INVENTORY_.............................. 18

2 RELIABILITY COEFFICIENTS FOR FIVE SCALES OF _PRESCHOOL INVENTORY_ 19

3 ETHNIC GROUP MEMBERSHIP OF HEAD START TEACHERS--SUMMER, 1965............................ 21

4 DISTRIBUTION OF HEAD START TEACHERS (SUMMER, 1965) BY SIZE OF HOME COMMUNITY.......... 22

5 SOCIO-ECONOMIC ORIGINS OF TEXAS HEAD START TEACHERS.. 23

6 YEARS OF TEACHING EXPERIENCE: 1126 H.S. TEACHERS, 1965...................................... 24

7 YEARS TEACHING PUPILS RESEMBLING HEAD START CHILDREN.. 25

8 TABLE OF MEANS AND STANDARD DEVIATIONS FOR THE FORTY-SEVEN ITEMS OF THE _ORF_ BASED ON THE INITIAL OBSERVATION.................................. 33

9 INITIAL FACTOR ANALYSIS OF THE FORTY-SEVEN ITEMS OF THE _ORF_ RATING SCALE....................... 34

10 SPEARMAN-BROWN CORRECTED SPLIT-HALVES RELIABILITIES FOR _ORF_ SCALES........................ 40

11 PRODUCT-MOMENT CORRELATIONS AMONG INITIAL FACTOR-ANALYTICALLY BASED _ORF_ SCALE RAW SCORES.... 43

12 IMAGE ANALYSIS OF THE FORTY-SEVEN ITEM _ORF_ (INITIAL OBSERVATION).............................. 44

13 IMAGE ANALYSIS OF THE FORTY-SEVEN ITEM _ORF_ (FINAL OBSERVATION)................................ 49

Table		Page
14	MATRIX OF ORIGINAL IMAGE ANALYSIS OF THE FORTY-SEVEN ITEM ORF (INITIAL OBSERVATION).......	53
15	MATCHING OF TWO IMAGE ANALYSIS MATRICES (COSINES OF VECTORS)................................	60
16	PREDICTIONS OF CHANGES IN THE COGNITIVE FUNCTIONING OF HEAD START CHILDREN FROM TEACHER BEHAVIOR FACTORS OF THE ORF AND SELECTED TEACHER ATTITUDES AND NEEDS......................	62
17	CHANGES (DIFFERENCES) IN COGNITIVE FUNCTIONS OF HEAD START CHILDREN PREDICTED FROM OBSERVED TEACHER BEHAVIOR FACTORS MEASURED BY THE ORF AND FROM CERTAIN ATTITUDES......................	65
18	CHANGES (DIFFERENCES) IN HEAD START CHILDREN'S COGNITIVE FUNCTIONS PREDICTED FROM ORF SCORES, TEACHER ATTITUDES AND CHILDREN'S INITIAL (PRETEST) SCORES.................................	67
19	PREDICTIONS OF OBSERVED (ORF) TEACHER BEHAVIOR VARIATIONS FROM DEMOGRAPHIC AND PERSONAL CHARACTERISTICS OF HEAD START TEACHERS...........	70
20	MULTIPLE CORRELATIONS AND PERCENTAGES OF ORF CRITERION VARIANCE ACCOUNTED FOR BY A COMBINATION OF MEASURED TEACHER AND PUPIL ATTRIBUTES USED AS PREDICTORS..................................	74
21	MULTIPLE REGRESSION PREDICTIONS OF TEACHERS' (N=63) ORF-MEASURED BEHAVIOR FROM SCORES ON SELF-REPORT MEASURES OF TEACHERS' ATTITUDES...........	76
22	CHANGES OF SCORES BETWEEN "EARLY" AND "LATE" TESTINGS WITH PEABODY PICTURE VOCABULARY, SEGUIN FORM BOARD, AND PRESCHOOL INVENTORY FOR ALL SUBJECTS AND FOR TIME INTERVAL GROUPS............	82
23	ANALYSIS OF VARIANCE TO TEST HYPOTHESIS THAT SEX OF PUPIL AND AMOUNT OF HEAD START EXPERIENCE INFLUENCED PEABODY PICTURE VOCABULARY TEST SCORES..	87
24	MEAN PEABODY PICTURE VOCABULARY TEST SCORE OF BOYS AND GIRLS WITH AND WITHOUT HEAD START.......	88

Table Page

25 ANALYSIS OF VARIANCE SHOWING INFLUENCES OF SEX AND GROUP (HEAD START *VS.* NON-HEAD START) ON *PRESCHOOL* I (QUANTITATIVE) SCORES................ 89

26 MEANS FOR SEX AND HEAD START *VS.* NON-HEAD START GROUPS OF *PRESCHOOL* SCALE I (QUANTITATIVE) SCORES...................................... 90

27 ANALYSIS OF VARIANCE SHOWING INFLUENCE OF HEAD START EXPERIENCE ON *PRESCHOOL* II (PERSONAL-SOCIAL RESPONSIVENESS)................................. 91

28 MEANS FOR HEAD START AND NON-HEAD START CHILDREN ON *PRESCHOOL* SCALE II (PERSONAL-SOCIAL RESPONSIVENESS)................................. 92

29 ANALYSIS OF VARIANCE TESTING INFLUENCE OF SEX AND HEAD START EXPERIENCE ON *PRESCHOOL* SCALE III (CONTROL...DIRECTIONS)........................... 93

30 MEANS FOR HEAD START GROUPS OF *PRESCHOOL* SCALE III (CONTROL...DIRECTIONS) SCORES............... 94

31 ANALYSIS OF VARIANCE TESTING INFLUENCE OF SEX AND HEAD START EXPERIENCE ON *PRESCHOOL* SCALE IV (VERBAL-SOCIAL).................................. 95

32 MEANS OF HEAD START GROUPS ON SCALE IV OF *PRESCHOOL* (VERBAL-SOCIAL)...................... 96

33 ANALYSIS OF VARIANCE TESTING INFLUENCE OF SEX AND HEAD START EXPERIENCE ON *PRESCHOOL* SCALE V SCORES (DEVELOPMENTAL INCREMENTS)............. 97

34 MEAN SCORES ON *PRESCHOOL* V (DEVELOPMENTAL INCREMENTS) FOR HEAD START EXPERIENCE GROUPS..... 98

35 COMPARISONS OF TEST *VS.* RETEST VARIANCES OF PUPILS' CRITERION SCORES......................... 101

36 ANALYSIS OF VARIANCE: *PEABODY PICTURE VOCABULARY TEST*.................................. 104

Table Page

37 MEANS FOR TIME X CHILD'S SEX GROUPS ON THE *PEABODY TEST* 106

38 ANALYSIS OF VARIANCE [*PRESCHOOL* I (QUANTITATIVE)] .. 107

39 INTERACTION OF CHILD'S SEX WITH TEACHER'S ETHNICITY [*PRESCHOOL* (QUANTITATIVE) MEANS] 108

40 *PRESCHOOL INVENTORY*, SCALE I, MEANS REPRESENTING THE INTERACTION OF TIME, CHILD'S SEX AND TEACHER ETHNICITY ON *PRESCHOOL* QUANTITATIVE SCORES 109

41 ANALYSIS OF VARIANCE [*PRESCHOOL* II (UNNAMED)] 111

42 GROUP MEANS REPRESENTING THE INTERACTION OF TIME WITH TEACHER ETHNICITY ON *PRESCHOOL* SCALE II .. 112

43 MEANS REPRESENTING THE INTERACTING INFLUENCES OF TIME, CHILD'S SEX, AND TEACHER ETHNICITY ON "PERSONAL-SOCIAL RESPONSIVENESS" (*PRESCHOOL INVENTORY*) 113

44 ANALYSIS OF VARIANCE: *PRESCHOOL* III, CONTROL AND FOLLOWING DIRECTIONS 115

45 MEANS REPRESENTING THE EFFECT OF THE ETHNICITY OF TEACHERS ON *PRESCHOOL INVENTORY*, SCALE III, "CONTROL" 116

46 ANALYSIS OF VARIANCE: *PRESCHOOL INVENTORY*, SCALE V "DEVELOPMENTAL INCREMENTS" 117

47 MEANS REPRESENTING INTERACTION OF TIME WITH CHILD'S SEX AND TEACHER ETHNICITY ON *PRESCHOOL* "DEVELOPMENTAL" SCALE 118

48 CRITERION CHANGES (PRE- *VS.* POST-TESTS) IN CHILDREN AS RELATED TO "TEACHER BACKGROUND" PREDICTOR VARIABLES 121

49 CRITERION ITEMS USED IN THE PROJECT HEAD START EVALUATION AND SURVEY FORM (PHSEAS) TO MEASURE ACCEPTANCE *VS.* UNACCEPTANCE OF THE SOCIALLY DISADVANTAGED 129

Table | Page

50 PREDICTION OF TEACHERS' "ACCEPTANCE VS. NON-ACCEPTANCE" SCORES FROM ETHNICITY AND OTHER VARIABLES 130

51 CRITERION ITEMS MEASURING "OPTIMISM" FOR PROGRAM EFFECTIVENESS 131

52 HEAD START TEACHERS' "OPTIMISM" FOR POSITIVE RESULTS OF COMPENSATORY EDUCATION 132

53 HEAD START TEACHERS' CONFIDENCE IN THEIR EFFECTIVENESS AS TEACHERS OF DISADVANTAGED CHILDREN 134

54 PREDICTING OPTIMISM FOR PERSONAL TEACHING EFFECTIVENESS OF HEAD START PROGRAMS 135

55 MULTIPLE REGRESSION PREDICTION OF MTAI SCORES OF 1000 HEAD START TEACHERS 138

56 QUESTIONNAIRE ITEMS REGARDING PROJECT HEAD START AND STATISTICALLY SIGNIFICANT CHI-SQUARE GROUP DISTRIBUTION COMPARISONS 147

57 CURRICULAR AREAS IN WHICH HEAD START SHOULD HAVE BEEN MORE EFFECTIVE ACCORDING TO 473 TEXAS FIRST-GRADE TEACHERS 154

58 COMPARISONS OF HEAD START-EXPERIENCED CHILDREN ON TWENTY-FOUR EDUCATIONAL, SOCIAL, AND PERSONAL BEHAVIOR CHARACTERISTICS BY 473 TEXAS FIRST GRADE TEACHERS 157

59 HEAD START-EXPERIENCED (N=200) FIRST-GRADE TEACHERS' OPINIONS OF HEAD START AND NON-HEAD START FIRST GRADERS AS COMPARED WITH THE JUDGEMENTS OF 273 NON-HEAD START EXPERIENCED FIRST GRADE TEACHERS 161

LIST OF FIGURES

Figure **Page**

1 SCHEMATIC REPRESENTATION OF MULTIPLE INTERACTING FACTORS OPERATING THROUGH HEAD START CENTER PROGRAMS TO PRODUCE AND PREDICT CHANGES IN EDUCATIONAL DEVELOPMENT AND IN THE EXTRA-SCHOOL ENVIRONMENT...... 6

2 TEST-RETEST DISTRIBUTIONS OF ERROR SCORES ON PRESCHOOL INVENTORY................................. 84

CHAPTER I

ORIENTATION, CONCEPTUAL MODEL AND DESCRIPTION OF INSTRUMENTS

The American educational system which is basically middle-class oriented has long failed to meet the needs of socially disadvantaged children in the United States. Failure to achieve academically, lack of conformity to behavioral expectations of teachers, and an extremely high school drop-out rate are characteristics of the socially disadvantaged population. These may be construed to point out, on the one hand, the deficiencies of the American educational system in meeting the needs of the socially disadvantaged, or, on the other hand, the deficiencies of the socially disadvantaged child which hinder him in progressing adequately in the present system of education.

Differences in value systems regarding education, lack of exposure to materials common to middle-class life, differences in aptitudes, differences in well-established behavioral patterns and cognitive functions, and overall conditions of social deprivation are factors that have been argued to be contributors to the difficulties experienced by the socially disadvantaged child in the school framework. Since the American society is middle-class oriented, the solution to the problem faced by the socially disadvantaged child is being sought in part through the modification of that child in order that he may fit more adequately into the current system of education. In such an attempt, however, the search for a solution has led to a modification in the educational system as reflected in the experimental program of Project Head Start.

Project Head Start is a preschool program that was established to provide the preschool socially disadvantaged child with exposure to materials, experiences and values which should aid in his later school readiness and adjustment. In the summer of 1965, some 600,000 preschool children and 40,000 teachers participated in the program throughout the United States. The hypotheses associated with the establishment of this compensatory program proposed that not only would such a preschool program better prepare the socially disadvantaged child for entry into the first grade, but that the foundation provided by the program would enable the child to function more adequately throughout his school years. Ultimately it could aid in decreasing the degree of poverty presently found in the United States.

The haste with which Project Head Start was initiated has hindered well-controlled experimental evaluations of the program, but at the same time, it has enabled researchers to acquire and analyze a heterogeneity of data concerning children, teachers and programs which would not have been available if precise selection techniques had been employed in setting up the program.

The vast amount of data collected on such variables as teacher background, attitudes, and behavior; children's background, attitudes, and behavior; changes in teachers and children; and the immediate effectiveness of the program will provide researchers with information important not only for the modification of Project Head Start, but with information which could influence the structure of the educational system. Even more basically, data concerning the formulation of cognitive structures and behavioral patterns during the preschool years might be acquired and studied.

As a service to the Washington Research and Evaluation Office of Operation Head Start, the Personnel Services Research Center, under OEO Contract 508, has conducted extensive research on Project Head Start programs throughout the state of Texas. This research began in the summer of 1965 with an orientation program for teachers who would be involved in the Head Start Project in various centers throughout Texas. It continued until September, 1966. Various forms of data were collected on hundreds of children and teachers who participated in the programs. Subsequently, program center variations were considered in terms of direct observations of the teachers' classroom behavior toward children.

The present report will present the basic research model for the investigations, specific questions with which the research was concerned, and descriptions of all instruments used in the research. Findings concerning teachers who participated in Project Head Start will be presented along with results concerning the children. Lastly, opinions on the effectiveness of the program and the implications of the research will be discussed.

Problem

The basic problem of focus in the present research program was a manysided one consisting of numerous sub-problems. Fundamentally, our long-term interest centered on explaining changes and variations in the (a) educational development and (b) extra-school environments of children during the first six grades of elementary schooling as a function of antecedent variations among (a) teachers, (b) children, and (c) Project Head Start Center programs.

Although our basic and long-range interest lies in the longitudinal study and prediction of educational development and environmental change, more immediate and specific questions and hypotheses had, necessarily, to take precedence in research. Among the more important of these questions were the following:

> 1. Along what meaningful parameters (e.g., "teacher warmth;" "amount of verbal stimulation;" et al.) do the eight-week programs engaged in by different Project Head Start (PHS) Child Development Centers vary?
>
> 2. To what degree can such variations among Child Development Center programs as are the focus of the question immediately above be "explained," or predicted from data concerning selected antecedent factors (separately or in interaction) of

teachers and the children with whom they work--e.g., teachers' levels of "manifest needs for assistance" in coping with various classes of child behavior problems?

It should be noted carefully that the two quite general questions just posed focused upon the accurate description (and on the prediction) of differences among Child Development Centers in their "input" to children. Indeed, it seemed clear that these queries were crucial ones. They took logical precedence over most other classes of questions which might have been asked on the basis of our general paradigm, presented on Page 6. This was true because it appeared quite probable that such significant changes as were wrought in the competence of children through Project Head Start were themselves functions of variations in "input" characteristics which depended on (a) the characteristics of teachers and on (b) the _initial status of children_ in such factors as were expected to undergo change.

The observations just made serve nicely to point up certain important additional questions--questions susceptible to investigation through Project Head Start, 1965. Particularly salient among these were:

3. To what extent do reliably measurable changes in children's cognitive functioning and in other important classes of psychological factors occur in association with Head Start experience?

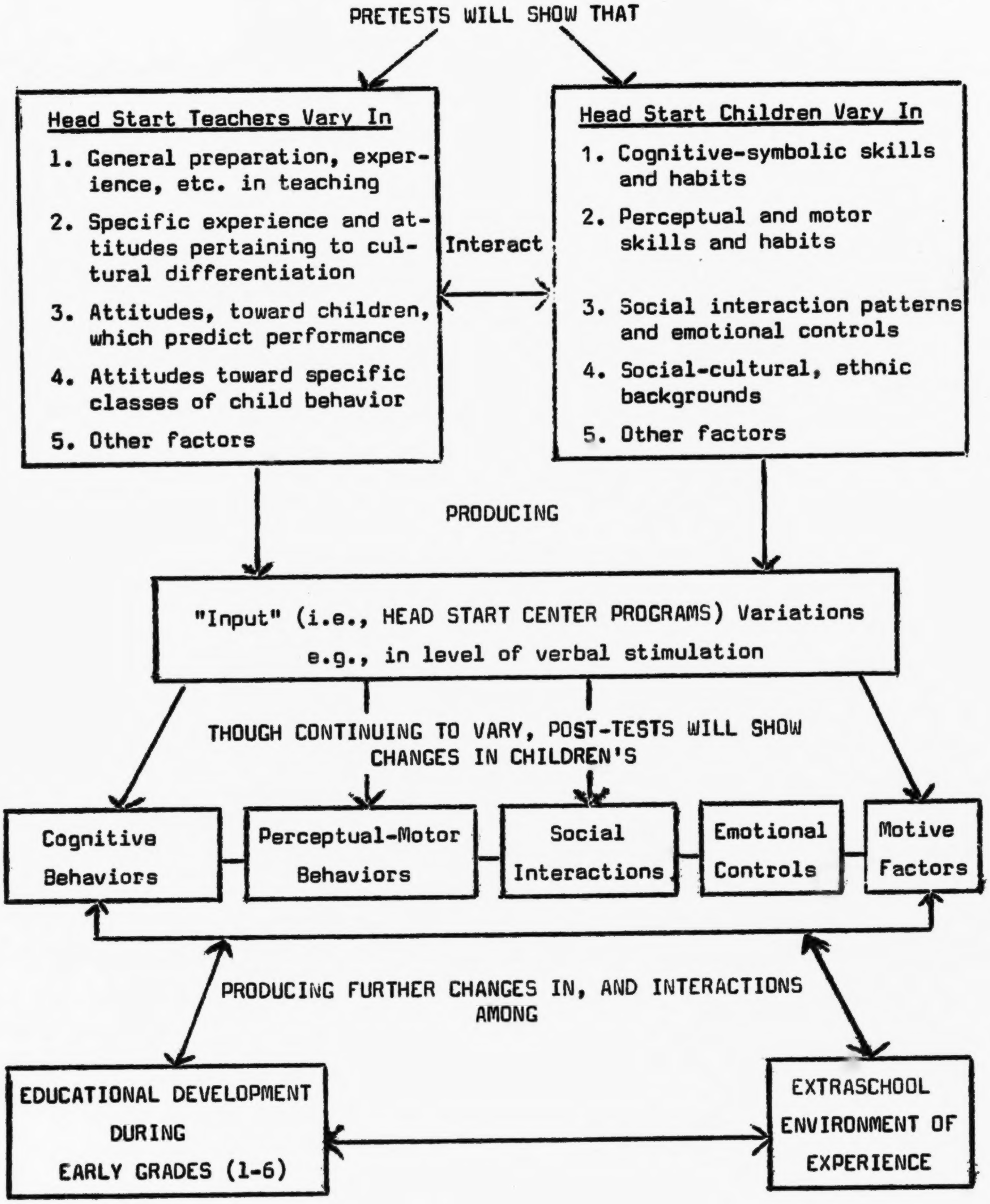
PRETESTS WILL SHOW THAT
Head Start Teachers Vary In
1. General preparation, experience, etc. in teaching
2. Specific experience and attitudes pertaining to cultural differentiation
3. Attitudes, toward children, which predict performance
4. Attitudes toward specific classes of child behavior
5. Other factors
Interact
Head Start Children Vary In
1. Cognitive-symbolic skills and habits
2. Perceptual and motor skills and habits
3. Social interaction patterns and emotional controls
4. Social-cultural, ethnic backgrounds
5. Other factors
PRODUCING
"Input" (i.e., HEAD START CENTER PROGRAMS) Variations
e.g., in level of verbal stimulation
THOUGH CONTINUING TO VARY, POST-TESTS WILL SHOW CHANGES IN CHILDREN'S
Cognitive Behaviors
Perceptual-Motor Behaviors
Social Interactions
Emotional Controls
Motive Factors
PRODUCING FURTHER CHANGES IN, AND INTERACTIONS AMONG
EDUCATIONAL DEVELOPMENT DURING EARLY GRADES (1-6)
EXTRASCHOOL ENVIRONMENT OF EXPERIENCE

Fig. 1-Schematic Representation of Multiple Interacting Factors Operating Through Head Start Center Programs to Produce and Predict Changes in Educational Development and in the Extra-School Environment

4. How accurately can such PHS-related changes as occur in children be predicted from measures of antecedent differences (a) among teachers, (b) among PHS Center programs, and (c) from initial measures of the children themselves?

5. Is variability among PHS Center children increased, sustained, or reduced significantly in important characteristics during the period of PHS experience?

The questions posed in this section were regarded as general and illustrative of those requiring immediate investigation rather than as an exhaustive delineation of the entire problem area. Unmentioned here, to this point, are other questions of substantial practical interest if, as seems likely, programs such as Project Heat Start are to be continued and even expanded in the future. Many of these questions fall in the general area of teacher selection research. They can be illustrated by mere mention of the testable hypothesis that certain attitudinal, social-economic, experience, and professional characteristics may differentiate those Head Start teachers who produce marked changes in children from those who seemingly produce less striking changes.

A Conceptual Model

At several earlier points in this document, reference has been made to a general paradigm, or conceptual model, which served to guide the ongoing research program at The University of Texas. Most of the questions posed in the preceding discussion of the problem area were generated directly from the paradigm, which is presented on Page 6. This paradigm should be examined carefully at this juncture for the range of hypotheses and predictions which it implies.

Essentially, our model involves the specification of relationships between multiple interacting factors operating prior to, and through, Head Start Child Development Center programs to influence and predict changes in interrelated features of the educational development and extra-school environments of children. Inasmuch as the model is a conceptual tool, rather than an operational one, it does not pretend to spell out precise ways of measureing the construct-variables which it invokes. Neither does it spell out the details of experimental design and data-analysis appropriate to the research we have done, albeit the fact that it specifies relationships among pertinent classes of variables surely pointed to various appropriate design and analysis strategies.

Data Collection

Teacher Factors

On the basis of the previously described paradigm, from which our hypotheses and research questions arose, a factor-analytically based Autobiographical Data Form (related to that developed by Srole in Manhattan), the Minnesota Teacher Attitude Inventory (MTAI), and the Personnel Services Research Center's series of IRCOPPS measures of teachers' attitudes and characteristics were administered by trained examiners to some 1250 Texas Project Head Start teachers. Thus, data related to one class of variables specified by our model were obtained. A total of eleven instruments was used to measure variations among teachers in their program "input" to children. A copy of each has been placed in the appendix and is discussed below.

The Minnesota Teacher Attitude Inventory was used in collecting data concerning "authoritarian versus democratic" attitudes of the teachers. This inventory of 150 forced-choice items was designed (Leeds and Cook, 1947) to predict differential teacher abilities in bringing about good "teacher-pupil rapport." The authors of the completed and standardized inventory (Leeds, Cook, and Callis, 1951) have indicated that this seems to be tantamount to a measurement of authoritarian versus democratic values of teachers. Split-half reliability coefficients have been reported in the .90's.

Behavior variations among teachers were observed using the Observer's Rating Form (ORF). Initial analyses of this form yielded eight identifiable factors: (1) Stimulating Cognitive Perceptual Development, (2) Warmth and Supportiveness, (3) Respect for Child, (4) Motor Skills and Psychological Support, (5) Dependency Needs, (6) Positive versus Negative Reinforcement, (7) Perceptual and Emotional Control, and (8) Middle Class Orientation. The form was developed by the Personnel Services Research Center in Austin, Texas, and reported by Pierce-Jones, Friedman, Barron and Caldwell (1966). Twenty-three raters were used to obtain the observations after each had finished an intensive training program designed to achieve reliability among raters. A copy of the ORF is appended hereto.

Teacher irritability scores were obtained from the Behavior Classification Checklist. (P SRC 1181), developed by the same Center. The test is a teacher self-report form which has a split-half reliability of more than .90. There are nine factors or classes of children's behavior symptoms to which teachers are sensitive. These nine classes are: (1) Orderliness, (2) Sexual Activities, (3) Nonconformity, (4) Symptoms of Paranoia, (5) Physical-Verbal Aggression, (6) Withdrawn Behavior, (7) "Goody-Goody" Behavior, (8) Resistance and Negativism, and (9) Nervous Lack of Control. The inventory contains 92 items,and teachers are asked to respond to them on nine-point scales. The alternatives range from "Highly Irritating" to "Not at all Irritating" (Pierce-Jones, 1965).

The Personnel Services Research Center developed the Need For Assistance Inventory (19A), a multifactor inventory designed to measure teachers' manifest needs for assistance in helping children. The inventory has internally consistent scales and yields reliability coefficients centering around .90. The scales are used to determine classes of behavior which school people need assistance in managing. The scales also measure the intensity of need for help with each class of problems. Eight classes of behavior are found in the scales: (1) Rebellious Behavior, (2) Somatic Complaints of Children, (3) Immaturity and Withdrawal Behavior, (4) Shyness, (5) Managing Instruction, (6) Managing Classroom Discipline, (7) Nervous Hyperactivity of Children, and (8) Symptoms of Social Ill-Ease in Children.

Senior staff members of the Personnel Services Research Center at The University of Texas, Austin, designed the Teacher's Survey Form (TSF) both for collecting descriptive data concerning first-grade teachers and for surveying their perceptions of Head Start-experience, relative to non-Head Start experienced children, from similar environments. A copy of the TSF is appended. It contains 42 multiple choice items designed to elicit the data required in our studies.

Project Head Start Autobiographical Data Form (20b) was another instrument used. Most of the items for the form came from the previously partially standardized Autobiographical Data Form (20a) of the Personnel Services Research Center. This is an objectively scoreable device designed to survey in 77 items various facets of the individual's life history and present situation. It covers, for example, childhood family relationships; items of social-economic importance; school experiences; academic performance; religious affiliation, activities, and attitudes; models for identification;

health problems; and other matters. Many of the constituent items are designed to possess scalar properties in an ordinal sense at least, and a relatively large group of items has been subjected to factor analysis in order to sort out the variables being measured.

The _Project Head Start Personnel Experiences and Attitude Survey_ (_Form 24b_, _Appendix_) was designed specifically for administration to Head Start teachers in our studies. It represented an attempt to get a more thorough assessment of the experience, expectancies and commitment of teachers in Operation Head Start. The items were designed to bear on the following kinds of questions. "What do these teachers hope Head Start will achieve?" "How willing are they to work toward the ends they have in mind?" "How able are they to handle the task?"

Pierce-Jones (1965) earlier had developed (for IRCOPPS) a self report measure of teachers' orientations _vis a vis_ child behavior and its management. The resulting device was entitled _Dimensions of Teachers' Opinions_ (DOTO). DOTO consists of 110 statements which are couched, with very few exceptions, in a form which states a _contingent relationship_ between some action of a teacher and some consequent outcome in the behavior of a child. An illustrative item is this one: "Calling on a shy student frequently encourages him to participate."

As it now stands, DOTO is an outgrowth of revisions in two earlier forms of the instrument. Factor-analytic studies have indicated that it measures some fifteen first-order factors, e.g., "Realistic Encouragement of Achievement," which have been grouped, factor-analytically, into the following second-order factors:

I. Need to Understand Behavior and Encourage Competence
II. Concern for Child's Emotional Well-Being
III. Warm, Protective Orientation Toward Children
IV. Superficial vs. Sophisticated Mental Health Concepts
V. Prevention of Useless Tension

The Child Attitudes Survey (*Form 15A, Appendix*) was used to examine Head Start teachers' beliefs about children. We have sought to measure several dimensions of teachers' attitudes or beliefs about child behavior, its comprehensibility, and its causes, using a *Child Attitude Survey* (CAS) device resembling the well-known *Parent Attitude Research Instrument* (Part I) and an earlier one developed by Littman, Moore, and Pierce-Jones (1957).

Factor analyses which we have made of the responses of teacher samples to the CAS indicate that the instrument, at one level, probably measures the following construct-variables:

I. Child Viewed as Extension of Self
II. Biogenic (Hereditary) Causation of Behavior
III. Trust vs. Distrust of Children
IV. Need for Rigid Control of the Child
V. Informal Socialization of Behavior

Measures of Cognitive changes in Children

Four instruments were used to measure the cognitive functions of Head Start and non-Head Start children. These instruments were: (1) the *Sequin Form Board*, (2) the *Peabody Picture Vocabulary Test*, (3) the *Bender Visual-Motor Gestalt Test* (Hubbard Adaptation), and (4) Caldwell's *Project Head Start Preschool Inventory*.

The *Sequin Form Board* (Arthur Revision) is a performance test which measures a child's perceptual ability as well as his hand-eye motor coordination, manual dexterity, and task reaction. The test consists of a number of geometrically shaped blocks, which are to be placed in identically shaped recesses in the board. The time in seconds in which the subject accomplishes this task is the score obtained in the observation. The results presented in this Report are based on the shortest time of the three trials attempted by each subject.

The *Peabody Picture Vocabulary Test* is designed to provide an estimate of a child's verbal intelligence through measuring his hearing (or comprehension) vocabulary. Spanish-speaking children were tested in colloquial Spanish by Spanish-speaking examiners whenever necessary. Many variations of spoken Spanish are used along the Texas border, so "Castillian" Spanish translations of tests were considered inadequate for this study involving many children who speak other Spanish dialects. The Spanish used was, therefore, changed to one of two dialects suited to a particular locale. Spanish speaking school personnel were consulted in making the necessary test modifications. All scores on the Peabody Picture Vocabulary Test were analyzed in raw score terms. Appropriate norms are not yet available for disadvantaged Texas children.

The Bender Visual-Motor Gestalt (Hubbard Adaptation) is a non-verbal test in which a child is asked to reproduce, as accurately as possible with pencil and paper, a projected design which is shown to him on a screen. The child's drawings of Bender figures are considered by some to provide useful information concerning perceptual and other cognitive functions, "developmental level," and possible neurological dysfunction. Each child's figures were scored from I (for highest attainment) to VI (for lowest attainment) by two raters. A score of 2 indicated that two raters scored a child's drawings as correctly perceived and reproduced except for those deviations which could be anticipated for a "typical seven year old." A score of 4 indicated that two raters scored all of a child's drawings as correctly perceived, with any deviations being merely those typical of six year old children. A score of 6 meant that two raters agreed that five to eight of a child's drawings were identifiable even though there were deviations which could be expected of five year olds. A score of 8 indicated a level of performance typical of four year olds, while a score of 10 indicated inhibited scribbling, possibly appropriate at the three year level of child development. Those receiving scores of 12 made scribbling marks indicative of reproductions below the three-year-old level. Odd numbered scores (i.e., 3, 5, 7, 9 and 11) indicated lack of inter-rater agreement. The best interpretation of such scores developmentally might be that the drawings rated fell between the even numbered scores, or ratings, defined above, i.e., a 5 would indicate reproductions that were of a higher developmental level than a 6, as previously defined, but less than 4.

The Preschool Inventory, developed by Caldwell for Project Head Start, includes items which measure a child's attainment in the following areas: (1) basic information and vocabulary; (2) number concepts and ordination; (3) concepts of size, shape, motion, and color; (4) concepts of time, object class, and social function; (5) visual-motor performance; (6) ability to follow instructions; and (7) independence and self help. The test yields scores on 5 scales: (1) quantitative reasoning; (2) unnamed;

control of behavior and following directions; (4) verbal-social concepts; and (5) developmentally incremental items.

The Preschool Inventory was designed to assess the amount of information a child might have acquired before entering preschool. Seventy items were selected by us to assess the performance of the Head Start children tested for the studies described in the Report. These items were selected to represent the 20 logical unit sections of the Preschool Inventory.

The inter-scale correlations and reliability coefficients obtained for the Preschool Inventory used with our sample of 443 Texas Head Start children are presented in Tables 1 and 2.

In accepting the conceptual model developed by Pierce-Jones (cf., Page 6, this Report), several assumptions had to be made. An important one dealt with variations in teachers, leading to variations in "input." The model states that variations occur in teachers' preparation, experience, attitudes, and other factors. Data pertinent to this statement were obtained by means of the Autobiographical Data Form (20b) and the Project Head Start Personnel Experience and Attitude Survey (24b). These forms were administered to 1256 teachers who participated in Texas Head Start programs.

TABLE 1

Intercorrelations Among Scales of Caldwell *Preschool Inventory*
(N = 443 Texas Head Start Children)

Scale	1	2	3	4	5
1. Quantitative		.5848	.5106	.0090	.9052
2. Unnamed			.4687	.1712	.6083
3. Following instructions				-.0013	.4479
4. Verbal-Social					.2747
5. Developmental					

TABLE 2

Reliability Coefficients for Five Scales of *Preschool Inventory*
(N = 443)

Scale	Spearman-Brown Corrected Reliabilities
1. Quantitative	.9045
2. Unnamed	.8036
3. Following Instructions	.7606
4. Verbal-Social	.7661
5. Developmental	.8789

Ethnicity was an obvious point of variation. The largest percentage of teachers came from the so-called Anglo group; however, other groups were also represented. The results are presented in Table 3. Teachers also varied in the size of the childhood communities from which they came.

By contrasting rural community backgrounds (population of 2500 or below) with urban backgrounds (population above 2500) the investigators found that 46.9% of the teachers in the sample came from rural community backgrounds, and that 53.4% came from urban community backgrounds. The actual breakdown of community backgrounds is presented in Table 4.

In considering the socio-economic background of the teachers, the fathers' occupations were the data obtained. The results appear in Table 5. Quite clearly, most of the teachers came from the "blue collar" or working classes but other levels were also represented.

Experience in teaching was measured in two ways: (1) the amount (in years) of experience as a teacher and (2) the amount (in years) of experience in teaching children who resembled those the teacher expected to encounter in Project Head Start. Tables 6 and 7 summarize the data descriptive of these two characteristics of our sample of Texas Head Start teachers.

TABLE 3

Ethnic Group Membership of Texas Head Start Teachers--Summer, 1965

Ethnic Group	N	Per Cent
Negro	282	23
Mexican American	346	28
Anglo	609	49

TABLE 4

Distribution of Texas Head Start Teachers (Summer, 1965) by Size of Home Community

Home Community Size	N of Teachers	% of Teachers
Rural or Farm	304	25.2
Less Than 500 People	59	4.7
500 - 2500 People	218	17.4
2501 - 7500 People	177	14.1
7501 - 10,000 People	68	5.4
10,001 - 25,000 People	108	8.5
25,001 - 100,000 People	124	10.0
100,001 - 500,000 People	84	6.7
500,001 or more People	100	8.0
N =	1242	

TABLE 5

Socio-Economic Origins of Texas Head Start Teachers

Occupations of Teachers' Fathers	Per Cent
1. Job requiring no specialized education (*e.g.*, laborer; domestic)	26.5
2. Job requiring some special training/experience (e.g., typist, truck driver)	16.9
3. Job requiring more special training/experience (e.g., barber, bookkeeper)	27.2
4. Semi-professional--requires high school plus technical school or equivalent (e.g., nurse, county agent)	16.4
5. Professional-Managerial--middle level responsibility, college degree or equivalent, but not graduate degree (e.g., CPA, teacher, editor)	9.1
6. Professional-Managerial--upper level responsibility, requires graduate degree (e.g., Professor, Physician)	3.9
N = 1208	

Table 6

Years of Teaching Experience: 1126 H. S. Teachers, 1965

Years of Experience	Percent of Teachers
First Year	6.8
1 - 5	23.8
6 - 10	22.3
11 - 15	12.0
16 - 20	10.6
21 - 25	8.3
26 - 30	3.9
36 - 40	1.6
40 years plus	0.7

TABLE 7

Years Teaching Pupils Resembling Head Start Children

Years Experience	Per cent of Teachers
None	16.1
1	11.6
2	7.8
3	6.3
4	6.0
5	6.9
6-9	16.1
10-14	13.1
15 or more	16.6

N = 1243

Obviously (cf. Tables 6 and 7), teachers with various amounts of experience worked in Texas's Project Head Start during the summer of 1965. Besides these background differences, however, teaching behavior variations were also measured in teachers' Head Start classrooms using the _Observer's Rating Form_ (_ORF_) developed by Pierce-Jones, Caldwell, and Linn (1966).

The Head Start Program, as "input" to disadvantaged children, was conceptualized, for our purposes, not in curricular terms, but as the teacher's classroom behavior relative to children. Thus, the program was thought of in terms of the teacher's "style" of working with her pupils.

A major question which was confronted, however, asked to what _degree_ variations in teacher behavior ("input," or program variations) contributed to measurable changes in children's behavior. It was necessary as a first step, therefore, to find the meaningful parameters along which such teacher-based program variations occurred.

The investigations which have been conducted to answer this salient question are reported in the next chapter of this _Report_.

CHAPTER II

AN OBSERVER'S RATING FORM TO MEASURE HEAD START PROGRAM VARIATIONS AS VARIANCE IN PATTERNED TEACHING BEHAVIOR

Difficulties encountered in measuring human behavior in natural settings by direct observational methods, and the objections to drawing firm conclusions from data so obtained, have been remarked upon quite frequently. Despite such difficulties, however, the stubborn fact remains that there are few alternative ways to make meaningful measures of teaching than by placing trained observers in classrooms to witness and to record systematically what is taking place. Measures of teachers' attitudes; indices of their demographic backgrounds, education, and training; and measures of changes in pupils are obviously important. Nonetheless, the question still remains: "What did the teacher do in the classroom to effect changes in children?"

The _Observer's Rating Form_ (_ORF_)--see Caldwell, Pierce-Jones, and Linn (1966)--was designed to guide observers in rating specific behavior patterns of teachers in pre-school and primary grade classes. Forty-six rating scales and one categorical item were included in the _ORF_, a copy of which is included as Appendix A to this _Report_. The _ORF_ was developed without any conscious preference or prejudice regarding particular methods of teaching. Instead, it was designed to guide a trained observer in recording the degree to which certain characteristics, which have been regarded as important by various theorists and empirical investigators, were occurring in the classroom activity. The ORF focused directly on the behaviors of the teachers.

Each of the behavior variables to be rated was selected because a specific investigator had observed its relevance, or a theorist had pointed out its likely relationship to cultural disadvantagement.

All ORF items, except one, were rated on 7-point scales designed to reflect amount, intensity, or frequency of some teacher behavior. The items were thus considered to be related to underlying behavioral continua.

It was assumed that, when an observer had established rapport in a classroom, the teacher being observed generally would show behavior in working with pupils which would not be altogether unrepresentative of her usual classroom, or teaching, behavior. Certainly our reliability studies with the ORF have suggested that a teacher's behavior probably does not change dramatically in its observed features from one day to another.

Bases for Developing ORF Items

This section of the Report should probably be read with plentiful reference to the Observer's Rating Form presented in

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Appendix A. The first thirteen items, each requiring an observer to record a rating of teaching behavior, are concerned with appraising the degree of the teacher's efforts to encourage cognitive-symbolic growth in children. These items were included because of the frequently reported language deficiencies, cognitive deficits, paucity of opportunities to communicate meaningfully, and the dearth of systematic perceptual stimulation in the environments of socially disadvantaged children (cf., Deutsch, 1963; Bernstein, 1961, 1962; Riessman, 1962; Hess, 1964; and John, 1964). Variations in teaching behavior directed toward stimulating cognitive-symbolic development, including linguistic development, should, according to the Pierce-Jones model (cf., Page 6, this Report), have produced measurable changes in these facets of children's development.

Six items, i.e., 14 through 19, dealt directly with the teacher's presentation of visual and auditory stimulation and opportunities for learning to make more adequate discriminations in these areas. The bases for framing these items can be found in work by Deutsch (1964); Le Shan (1962); Riessman (1962); and Lott and Lott (1963), which indicates the extent to which perceptual-motor deficits occur among disadvantaged children. The degree to which teachers provide explicit encouragement for development in perceptual-motor skills should be related to observable (i.e., measurable) growth of children in these domains.

Items 20 through 24 covered areas of teacher behavior which appeared to bear upon children's social behavior. Thus, the teaching of such matters as respect for others, using adults as "resource persons," respect for property, and the like were rated. The particular items used were based on studies by Ausubel and Ausubel (1963), Deutsch (1964), Riessman (1962), and Lott and Lott (1962). Again, our research prediction was that teacher behavior which is aimed at stimulating the acquisition of the social behaviors focused on should tend to yield growth in them.

Items 25 through 35 related to teaching which might enhance and nurture the emotional development of Head Start children. These items covered such matters as the degree to which the teacher identified with the pupils; her sensitivity to children's individual needs; her encouraging the child to accept middle class values and to achieve positive self regard; teacher affection; and the teacher's showing of respect for the child and his family. The work of such scholars as Erikson (1950), Riessman (1962) and Lott and Lott (1963) led to the development of these items of the ORF.

Items 36 through 42 concerned teacher behavior presumably capable of influencing the child's motivation, and again were based on such findings as those of Deutsch (1964), LeShan (1952) and Erikson (1950). Teacher behavior which might generate enthusiasm for learning, acceptance of delayed goal gratification, and self-dependence, etc., was considered likely to be productive of desirable changes in the performance of the disadvantaged children studied in this research.

Items 43 through 47 might have related to several of the above matters, but, more specifically, dealt with the teacher's own need to gain appreciation, or affection, from children; with the teacher's tolerance of deviant behavior; her flexibility; the types of punishment she used; and tho tendency to develop a "questioning orientation" in the child.

Initial Factor Analytic Studies of the ORF

After preparation of the Observer's Rating Form (ORF), twenty-three observers were given one week of intensive training in its use. The training was designed to assure substantial comparability (reliability) among the raters in using the ORF. Practice observations and ratings of classes were made during the week-long training period. Generally, inter-rater correlations at the close of training clustered fairly closely around a median value of r=.80.

Subsequent to completion of the training of the observers, the research staff selected a representative sample of 70 Head Start Centers (3% of the Texas total) in forty communitities throughout the State. In each Center at least two, and sometimes as many as six, observers made complete ORF ratings of at least one daily Head Start classroom session. In this fashion, 493 individual ORF protocols were obtained. Observed means and standard deviations for each of the 47 ORF rating items appear in Table 8.

Product-moment correlation coefficients among all possible pairs of ORF item-scales were computed. The correlation matrix so obtained was then subjected to factor extraction by the principal axis method. Those factors having eigenvalues of 1.00 or higher were then rotated analytically to orthogonality by Kaiser's (1958) Varimax Method.

Results

Nine commom factors, accounting *in toto* for 64% of the variance, were extracted by the factorization described above. The factors and statements of the item-scales having loadings less than ±.40 have been omitted from the presentation in Table 9.

Discussion and Naming of Factors

It should be stressed again that each factor found in the ORF refers to the observed behavior of Head Start teachers and that each factor thus measures the behavior of teachers toward children in their Head Start classes.

TABLE 8

TABLE OF MEANS AND STANDARD DEVIATIONS FOR THE 47 ITEMS OF THE ORF BASED ON THE INITIAL OBSERVATION (N=148)

Item	M	S.D.
1.	2.68	1.50
2.	3.34	2.28
3.	2.86	2.02
4.	3.86	2.52
5.	3.57	1.84
6.	3.34	1.97
7.	1.91	1.03
8.	3.68	1.95
9.	3.40	1.81
10.	3.52	1.92
11.	2.99	1.49
12.	3.62	1.95
13.	3.55	2.04
14.	3.05	1.78
15.	3.72	1.95
16.	2.91	1.47
17.	3.68	1.89
18.	3.79	2.08
19.	2.29	2.03
20.	3.86	1.63
21.	3.94	1.87
22.	4.07	1.64
23.	3.97	1.90
24.	4.77	2.56
25.	3.30	1.63
26.	3.92	1.75
27.	5.07	1.57
28.	3.75	1.43
29.	4.18	2.61
30.	3.50	2.03
31.	4.84	2.42
32.	4.05	2.07
33.	3.41	1.66
34.	5.01	1.90
35.	3.86	1.67
36.	3.48	1.70
37.	4.55	2.25
38.	3.88	1.99
39.	3.94	1.75
40.	6.18	1.50
41.	2.89	1.12
42.	3.28	1.64
43.	3.94	.98
44.	3.24	1.45
45.	4.39	2.04
46.	5.09	2.60
47.	3.66	1.80

TABLE 9

Initial Factor Analysis of the Forty-Seven Items of the ORF Rating Scale

FACTOR I - Stimulating Cognitive Perceptual Development % Var. = 15.5791

LOADING	ITEM	CONTENT
.77	9	Extent to which the teacher uses and stresses a variety of verbs.
.75	10	Extent to which the teacher stresses the use of descriptive adjectives.
.69	6	Extent to which teacher pays attention to development of an "elaborated" (formal) language code vs. acceptance of a "restricted (public) code.
.68	8	Frequency with which teacher attempts to have children use complete sentences in verbal communication.
.65	13	To what extent does the teacher use consistently a feedback system in order to develop language facility.
.63	1	Extent to which the teacher insists that the child use verbal communication.
.53	5	Extent to which the teacher emphasizes the environment in which the child finds himself at any given time.
.53	36	Degree to which the teacher uses specific techniques to develop an enthusiasm for learning.
.53	12	To what extent does the teacher use multi-sensory stimulation in teaching?
.52	3	Extent to which each child is given the opportunity to organize and to express his ideas in answering questions.
.51	7	Extent to which teacher uses complete sentences in communicating with children.
.51	2	Extent to which each child is given the opportunity to organize an to express his ideas in explaining what he is doing.
.50	11	Frequency with which teacher pays specific attention to the importance of following directions.
.47	16	Degree to which the teacher attempts to teach the children to list
.46	15	Degree to which teacher provides for auditory discrimination.

(Factor I, continued....)

TABLE 9 continued

FACTOR I, continued...

LOADING	ITEM	CONTENT
.45	14	Degree to which teacher provides for visual discrimination.
.44	4	Extent to which each child is given the opportunity to organize and to express his ideas in sharing experiences.
.42	47	Extent to which the teacher seeks to develop a "questioning orientation" on the part of the child.
.40	39	Degree to which the teacher creates an atmosphere or attitude of self-dependency rather than an atmosphere or attitude of "other-dependency."

FACTOR II - Warmth and Supportiveness % Var. = 10.0574

LOADING	ITEM	CONTENT
.71	23	To what extent does the teacher encourage the pupils to use an adult (in this case the teacher or parent) as a resource person.
.71	24	Degree to which the teacher makes specific attempts to develop more realistic concepts (concepts that will be more congruent with those found in the huge majority of American schools and homes) of the roles of male and female in the family.
.58	37	Degree to which the teacher attempts to develop in the children acceptance of and familiarity with delayed goal gratification.
.56	47	Extent to which the teacher seeks to develop a "questioning orientation" on the part of the child.
.54	31	Extent to which the teacher indicates to the child verbally that "the school cares."
.51	12	To what extent does the teacher use multi-sensory stimulation in teaching?
.49	32	Extent to which the teacher uses specific references or techniques to combat the negative self-image often found among culturally disadvantaged children, especially Negro children.
.48	27	Extent to which the teacher seems to have specific techniques for coping with individual pupil's frustrations.
.42	34	Extent to which teacher seems to have specific techniques for handling emotional problems of children.
.40	38	Degree to which the teacher creates an atmosphere of "possibility" to replace the attitude of passivity and defeatism which is common among children from impoverished areas.

TABLE 9 continued

FACTOR III - Respect for Child % Var. = 8.2217

LOADING	ITEM	CONTENT
.79	44	Degree to which the teacher displays tolerance for deviant behavior.
.63	25	To what extent does the teacher indicate her identification with the group which she teaches.
.61	33	Extent to which the teacher indicates respect for the children's families.
.61	41	Degree to which the teacher uses negative vs. positive reinforcement in learning situations.
.61	42	Degree to which the teacher uses negative vs. positive reinforcement in behavior situations.
FACTOR IV - Motor Skills and Psychological Support		% Var. = 6.1177
.70	18	Extent to which the teacher makes specific provisions for the development of motor skills.
.60	19	Degree to which the physically active activities seem suited to the group participating.
.53	17	Extent to which the teacher uses physically active situations to promote pupil learning.
.43	32	Extent to which the teacher uses specific references or techniques to combat the negative self-image often found among culturally disadvantaged children, especially Negro children.
.40	31	Extent to which the teacher indicates to the child verbally that "the school cares."
FACTOR V - Teacher Dependency Need		% Var. 3.8787
.79	43	Extent to which the teacher seems to depend on expressions of appreciation or affection from the children.
.73	35	To what extent is there physical contact between teacher and children.

TABLE 9 continued

FACTOR VI - Positive vs. Negative % Var. = 3.0738

LOADING	ITEM	CONTENT
.78	40	Extent to which the teacher uses material vs. non-material for pupil responses or behavior.
.54	46	What type of punishment does this teacher use for behavior problems.
FACTOR VII - Perceptual and Emotional Control		% Var. = 8.5783
-.65	16	Degree to which the teacher attempts to teach the children to listen.
-.64	28	Extent to which the teacher attempts to help the child develop self discipline.
-.61	26	Degree to which the teacher seems to be aware of pupil frustration.
-.59	11	Frequency with which teacher pays specific attention to the importance of following directions.
-.49	27	Extent to which the teacher seems to have specific techniques for coping with individual pupil's frustrations.
-.49	15	Degree to which teacher provides for auditory discrimination.
-.40	14	Degree to which teacher provides for visual discrimination.
FACTOR VIII - Middle Class Orientation		% Var. = 5.8951
.62	29	Extent to which the teacher attempts to inculcate in the child acceptance of personal responsibility vs. placing of blame on others.
.54	21	To what extent does the teacher attempt to inculcate in the child respect for the property of others.
.52	20	To what extent does the teacher attempt to inculcate in the child respect for the ideas of others.
.48	22	To what extent does the teacher attempt to inculcate in the child respect for the feelings of others.
.47	4	Extent to which each child is given the opportunity to organize and to express his ideas in sharing experiences.
.45	2	Extent to which each child is given the opportunity to organize and to express his ideas in explaining what he is doing.

TABLE 9 continued

FACTOR IX - NOT INTERPRETABLE % Variance = 2.7906

LOADING	ITEM	
.83	30	Extent to which the teacher responds to the consequences of an act vs. responding to the child's intent.
-.32	31	Extent to which the teacher indicates to the child verbally that the "school cares".

Eight of the nine ORF factors obtained in this first study were considered to be interpretable and were named, based on item content, as:

Factor I	Stimulating the Child's Cognitive-Perceptual Development
Factor II	Providing Warmth and Supportiveness to Children
Factor III	Showing Respect for the Child
Factor IV	Stimulating Motor Skills and Giving Psychological Support
Factor V	Dependency Needs of the Teacher
Factor VI	Using Positive vs. Negative Reinforcement
Factor VII	Encouraging Perceptual Growth and Emotional Control
Factor VIII	Communicating a Middle Class Orientation
Factor IX	Uninterpretable

Our examinations of the 8 identifiable factors named above seemed to indicate that, in addition to Factor I dealing with teachers' attempts to stimulate cognitive and perceptual development, seven other variable attributes of teacher's behavior relative to Head Start children constituted an initially meaningful and comprehensive set of dimensions (or parameters) within which to provide differential descriptions of Head Start classroom programs.

For the sample of 493 ORF protocols available, raw scores, based on the algebraic summation of the numerical rating provided for each item, were obtained for each of the 8 factors. This is to say that the ORF items loading each of the 8 factors .40 or higher were treated as a scale, each available protocol thus yielding 8 raw scale scores.

Next, split-half (Spearman-Brown corrected) reliability coefficients were computed using these raw scores on each of the 8 factor analytically derived scales. These reliability coefficients are presented in Table 10.

The coefficients shown in Table 10 were considered sufficiently high to justify further work, except for Scale 6, Positive vs. Negative Reinforcement. Discussions with our observers indicated, however, that inadequate discrimination between negative and positive reinforcement apparently existed. This inadequacy could have accounted for the low value of the coefficient, and, at a minimum, indicated the need for more adequate directions for observers.

Later Development of the ORF

Almost inevitably, because of the method of obtaining raw ORF scores described above, high interscale correlations were to be expected. That relatively high interscale relationships did obtain in the ORF data is clearly revealed in Table 11. Of the

TABLE 10

Spearman-Brown Corrected Split-Halves Reliabilities for ORF Scales

Factor Scale Named	Reliability Coefficients
1. Stimulating Cognitive-Perceptual Development	.95
2. Providing Warmth and Supportiveness	.91
3. Showing Respect for Children	.85
4. Stimulating Motor Skills and Giving Psychological Support	.77
5. Dependency Needs of the Teacher	.62
6. Using Positive vs. Negative Reinforcement	.39
7. Encouraging Perceptual Growth and Emotional Control	.90
8. Communicating a Middle-Class Orientation	.88

28 correlation coefficients reported in Table 11, 16 exceed a value of $\pm .40$. Indeed, 15 correlations exceeded $r = \pm .60$, thus showing that better than 36 percent of the variance in one scale (X) could be predicted from knowledge of scores for a correlated *ORF* scale (Y). Even so, however, scales which are correlated as highly as $r = \pm .60$ may measure valuable amounts of specific variance if their respective reliabilities are relatively high. In the present instance (see Table 10) *ORF* scale reliabilities appeared reasonably high, having a median value of .87.

Although the reasoning just described led us to utilize the 8 original *ORF* factor-analytically derived scales in prediction studies described in later sections of this *Report*, it was decided to subject the matrix of correlations among *ORF* item ratings to further factor analysis by means of Kaiser's method of "image analysis." The application of this technique should have (1) reduced the number of factors, (2) increased scale reliability values, and (3) decreased the intercorrelations among the final scales.

The results found in image analyses are presented in Tables 12, 13, and 14. The first image analysis yielded seven factors, 6 of which seemed rationally interpretable and which were named: Factor I: *Respect for Child*; Factor II: *Stimulating*

TABLE 11

Product-Moment Correlations Among Initial Factor-Analytically Based ORF Scale Raw Scores (N = 493)

Factor Scale No.	1	2	3	4	5	6	7	8
1	---	.78	.64	.67	.35	-.09	.87	.83
2		---	.58	.75	.41	.07	.72	.72
3			---	.54	.37	-.13	.65	.63
4				---	.40	-.04	.66	.68
5					----	.13	.33	.33
6						---	-.05	-.03
7							---	.76
8								---

TABLE 12

Image Analysis of the 47-Item ORF (Initial Observation)

53.80 % of Total Variance Extracted

68.76% of Total Variance is Common (N=148)

FACTOR I - Respect for Child % Var. = 9.2695

LOADING	ITEM	CONTENT
.62	33	Extent to which the teacher indicates respect for the children's families.
.57	44	Degree to which the teacher displays tolerance for deviant behavior.
.56	25	Extent to which each child is given the opportunity to organize and to express his ideas in answering questions.
.51	41	Degree to which the teacher uses negative vs. positive reinforcement in learning situations.
.49	39	Degree to which the teacher creates an atmosphere or attitude of self-dependency rather than an atmosphere or attitude of "other-dependency."
.48	38	Degree to which the teacher creates an atmosphere of "possibility" to replace the attitude of passivity and defeatism which is common among children from impoverished areas.
.47	36	Degree to which the teacher uses specific techniques to develop an enthusiasm for learning.
.46	45	Extent to which the teacher uses unplanned incidents as an opportunity for learning vs. consistent focusing on the planned task at hand.
.44	27	Extent to which the teacher uses and stresses a variety of verbs.
.44	26	Extent to which the teacher stresses the use of descriptive adjectives.
.44	47	Extent to which the teacher seeks to develop a "questioning orientation" on the part of the child.
.43	42	Degree to which the teacher uses negative vs. positive reinforcement in behavior situations.
.40	34	Extent to which teacher seems to have specific techniques for handling emotional problems of children.

TABLE 12 (CONTINUED)

FACTOR II - Stimulating Cognitive-Perceptual Development and Control % Var. = 10.7269

LOADING	ITEM	CONTENT
-.68	7	Extent to which teacher uses complete sentences in communicating with children.
-.63	11	Frequency with which teacher pays specific attention to the importance of following directions.
-.61	9	Extent to which the teacher uses and stresses a variety of verbs.
-.54	13	To what extent does the teacher use consistently a feedback system in order to develop language facility.
-.53	10	Extent to which the teacher stresses the use of descriptive adjectives.
-.53	8	Frequency with which teacher attempts to have children use complete sentences in verbal communication.
-.49	16	Degree to which the teacher attempts to teach the children to listen
-.46	6	Extent to which teacher pays attention to development of an "elaborated" (formal) language code vs. acceptance of a "restricted" (public) code.
-.46	14	Degree to which teacher provides for visual discrimination.
-.45	41	Degree to which the teacher uses negative vs. positive reinforcement in learning situations.
-.44	12	To what extent does the teacher use multi-sensory stimulation in teaching?
-.40	15	Degree to which teacher provides for auditory discrimination.

FACTOR III - Warmth and Supportiveness % Var. = 11.6677

LOADING	ITEM	
-.65	10	Extent to which the teacher stresses the use of descriptive adjectives.
-.64	31	Extent to which the teacher indicates to the child verbally that "the school cares."
-.57	5	Extent to which the teacher emphasizes the environment in which the child finds himself at any given time.
-.55	24	Degree to which the teacher makes specific attempts to develop more realistic concepts (concepts that will be more congruent with those found in the huge majority of American schools and homes) of the roles of male and female in the family.

FACTOR III, continued...

LOADING	ITEM	CONTENT
-.54	9	Extent to which the teacher uses and stresses a variety of verbs.
-.52	29	Extent to which the teacher attempts to inculcate in the child acceptance of personal responsibility vs. placing of blame on others.
-.50	37	Degree to which the teacher attempts to develop in the children acceptance of and familiarity with delayed goal gratification.
-.48	32	Extent to which the teacher uses specific references or techniques to combat the negative self-image often found among culturally disadvantaged children, especially Negro children.
-.47	35	To what extent is there physical contact between teacher and children.
-.46	12	To what extent does the teacher use multi-sensory stimulation in teaching?
-.41	23	To what extent does the teacher encourage the pupils to use an adult (in this case the teacher or parent) as a resource person.

FACTOR IV - Motor Skills and Psychological Support % Var. = 8.0025

LOADING	ITEM	CONTENT
.61	17	Extent to which the teacher uses physically active situations to promote pupil learning.
.58	19	Degree to which the physically active activities seem suited to the group participating.
.58	18	Extent to which the teacher makes specific provisions for the development of motor skills.
.45	29	Extent to which the teacher attempts to inculcate in the child acceptance of personal responsibility vs. placing of blame on others.
.43	34	Extent to which teacher seems to have specific techniques for handling emotional problems of children.
.43	22	To what extent does the teacher attempt to inculcate in the child respect for the feelings of others.
.40	42	Degree to which the teacher uses negative vs. positive reinforcement in behavior situations.

TABLE 12. (CONTINUED)

FACTOR V - Middle Class Orientation % Var. 10.0111

LOADING	ITEM	CONTENT
-.58	3	Extent to which each child is given the opportunity to organize and to express his ideas in answering questions.
-.58	4	Extent to which each child is given the opportunity to organize and to express his ideas in sharing experiences.
-.53	2	Extent to which each child is given the opportunity to organize and to express his ideas in explaining what he is doing.
-.52	1	Extent to which the teacher insists that the child use verbal communication.
-.52	22	To what extent does the teacher attempt to inculcate in the child respect for the feelings of others.
-.50	26	Degree to which the teacher seems to be aware of pupil frustration.
-.49	20	To what extent does the teacher attempt to inculcate in the child respect for the ideas of others.
-.48	21	To what extent does the teacher attempt to inculcate in the child respect for the property of others.
-.44	28	Extent to which the teacher attempts to help the child develop self discipline.
-.42	8	Frequency with which teacher attempts to have children use complete sentences in verbal communication.
-.41	39	Degree to which the teacher creates an atmosphere or attitude of self-dependency rather than an atmosphere or attitude of "other-dependency."

FACTOR VI - Dependency Needs and Reinforcement % Var. = 2.0272

LOADING	ITEM	CONTENT
.59	43	Extent to which the teacher seems to depend on expressions of appreciation or affection from the children.
.32	35	To what extent is there physical contact between teacher and children.
.31	40	Extent to which the teacher uses material vs. non-material rewards for pupil responses or behavior.

TABLE 12 (CONTINUED)

FACTOR VII - Uninterpretable

% Var. = 2.0954

LOADING	ITEM	CONTENT
.59	30	Extent to which the teacher responds to the consequences of an act vs. responding to the child's intent.

TABLE 13

Image Analysis of the 47 - Item ORF (Final Observation)

56.33 % of Total Variance Extracted

71.05% of Total Variance is Common (N=148)

FACTOR I % Var. = 14.2762

LOADING	ITEM	CONTENT
.70	16	Degree to which the teacher attempts to teach the children to listen.
.68	1	Extent to which the teacher insists that the child use verbal. communication.
.66	11	Frequency with which teacher pays specific attention to the importance of following directions.
.66	8	Frequency with which teacher attempts to have children use complete sentences in verbal communication.
.62	7	Extent to which teacher uses complete sentences in communicating with children.
.62	28	Extent to which the teacher attempts to help the child develop self discipline.
.56	9	Extent to which the teacher uses and stresses a variety of verbs
.55	13	To what extent does the teacher use consistently a feedback system in order to develop language facility.
.54	36	Degree to which the teacher uses specific techniques to develop an enthusiasm for learning.
.52	14	Degree to which teacher provides for visual discrimination.
.51	15	Degree to which teacher provides for auditory discrimination.
.45	22	To what extent does the teacher attempt to inculcate in the child respect for the feelings of others.
.44	6	Extent to which teacher pays attention to development of an "elaborated" (formal) language code vs. acceptance of a "restricted" (public) code.
.42	26	Degree to which the teacher seems to be aware of pupil frustration.
.42	10	Extent to which the teacher stresses the use of descriptive adjectives.

TABLE 13 (CONTINUED)

FACTOR II

% Var. = 7.6579

LOADING	ITEM	CONTENT
.71	24	Degree to which the teacher makes specific attempts to develop more realistic concepts (concepts that will be more congruent with those found in the huge majority of American schools and homes) of the roles of male and female in the family.
.62	23	To what extent does the teacher encourage the pupils to use an adult (in this case the teacher or parent) as a resource person?
.51	31	Extent to which the teacher indicates to the child verbally that "the school cares."
.49	34	Extent to which teacher seems to have specific techniques for handling emotional problems of children.
.48	32	Extent to which the teacher uses specific references or techniques to combat the negative self-image often found among culturally disadvantaged children, especially Negro children.
.47	37	Degree to which the teacher attempts to develop in the children acceptance of and familiarity with delayed goal gratification.
.43	12	To what extent does the teacher use multi-sensory stimulation in teaching?
.43	47	Extent to which the teacher seeks to develop a "Questioning orientation" on the part of the child.

FACTOR III

% Var. = 4.0380

LOADING	ITEM	
.54	30	Extent to which the teacher responds to the consequences of an act vs. responding to the child's intent.
-.45	47	Extent to which the teacher seeks to develop a "questioning orientation" on the part of the child.
-.45	37	Degree to which the teacher attempts to develop in the children acceptance of and familiarity with delayed goal gratification.

FACTOR IV

% Var. = 9.5156

LOADING	ITEM	
-.72	25	To what extent does the teacher indicate her identification with the group which she teaches?
-.68	44	Degree to which the teacher displays tolerance for deviant behavior.

TABLE 13 (CONTINUED)

FACTOR IV continued... % Var. = 9.5156

LOADING	ITEM	CONTENT
-.58	33	Extent to which the teacher indicates respect for the children's families.
-.58	41	Degree to which the teacher uses negative vs. positive reinforcement in learning situations.
-.54	26	Degree to which the teacher seems to be aware of pupil frustration.
-.53	42	Degree to which the teacher uses negative vs. positive reinforcement in behavior situations.
-.48	38	Degree to which the teacher creates an atmosphere of "possibility" to replace the attitude of passivity and defeatism which is common among children from impoverished areas.
-.46	36	Degree to which the teacher uses specific techniques to develop an enthusiasm for learning.
-.44	45	Extent to which the teacher uses unplanned incidents as an opportunity for learning vs. consistent focusing on the planned task at hand.

FACTOR V % Var. = 12.7036

LOADING	ITEM	
-.72	29	Extent to which the teacher attempts to inculcate in the child acceptance of personal responsibility vs. placing of blame on others.
-.63	4	Extent to which each child is given the opportunity to organize and to express his ideas in sharing experiences.
-.62	20	To what extent does the teacher attempt to inculcate in the child respect for the ideas of others?
-.61	2	Extent to which each child is given the opportunity to organize and to express his ideas in explaining what he is doing.
-.60	21	To what extent does the teacher attempt to inculcate in the child respect for the property of others?
-.52	9	Extent to which the teacher uses and stresses a variety of verbs.
-.49	10	Extent to which the teacher stresses the use of descriptive adjectives.
-.42	17	Extent to which the teacher uses physically active situations to promote pupil learning.

TABLE 13 (CONTINUED)

FACTOR V continued...

LOADING	ITEM	CONTENT
-.42	28	Extent to which the teacher attempts to help the child develop self discipline.

% Var. = 4.8080

FACTOR VI

LOADING	ITEM	
.64	43	Extent to which the teacher seems to depend on expressions of appreciation or affection from the children.
.59	35	To what extent is there physical contact between teacher and children.
.43	32	Extent to which the teacher uses specific references or techniques to combat the negative self-image often found among culturally disadvantaged children, especially Negro children.

% Var. = 3.3343

FACTOR VII

LOADING	ITEM	
-.50	17	Extent to which the teacher uses physically active situations to promote pupil learning.
.48	46	What type of punishment does this teacher use for behavior problems.
-.48	19	Degree to which the physically active activities seem suited to the group participating.

TABLE 14

MATRIX OF ORIGINAL IMAGE ANALYSIS OF THE 47 - ITEM ORF

(INITIAL OBSERVATION)

53.80% OF TOTAL VARIANCE EXTRACTED

68.76% OF TOTAL VARIANCE IS COMMON (N = 148)

	FACTORS						
ORF ITEM % VAR.	I 9.27	II 10.73	III 11.67	IV 8.00	V 10.01	VI 2.03	VII 2.10
1. Insists on verbal communication					-.52		
2. Gives opportunity to organize and express ideas of action					-.53		
3. Gives opportunity to organize and express ideas in answering					-.59		
4. Gives opportunity to organize and express ideas of experiences			-.37		-.58		
5. Emphasizes environment			-.57				
6. Pays attention to elaborated language code		-.46					
7. Uses complete sentences		-.68					

TABLE 14 (CONTINUED)

	FACTORS						
ORF ITEM	I	II	III	IV	V	VI	VII
% VAR.	9.27	10.73	11.67	8.00	10.01	2.03	2.10
8. Attempts to have child use complete sentences		-.53			-.42		
9. Uses and stresses variety of verbs		-.61	-.54				
10. Uses and stresses variety of adjectives		-.53	-.65				
11. Pays attention to importance of following directions		-.63					
12. Uses multi-sensory stimulation in teaching		-.44	-.46				
13. Uses a feedback system in language development		-.54			-.36		
14. Provides for visual discrimination		-.46					
15. Provides for auditory discrimination		-.40		.38			
16. Attempts to teach listening		-.49		.40	-.35		
17. Uses physically active situations to teach				.61			

TABLE 14 (CONTINUED)

	FACTORS						
ORF ITEM % VAR.	I 9.27	II 10.73	III 11.67	IV 8.00	V 10.01	VI 2.03	VII 2.10
18. Makes provision for motor development				.58			
19. Physical activities suited to group				.58			
20. Attempts to inculcate respect for others' ideas			-.40	.40	-.49		
21. Attempts to inculcate respect for others' property					-.48		
22. Attempts to inculcate respect for others' feelings			-.36	.43	-.52		
23. Encourages use of adult as resource			-.41				
24. Attempts to develop realistic concepts of roles			-.55				
25. Identifies with the group of children	.56						
26. Seems aware of pupil frustration	.44				-.50		

TABLE 14 (CONTINUED)

	FACTORS						
ORF ITEM	I	II	III	IV	V	VI	VII
% VAR.	9.27	10.73	11.67	8.00	10.01	2.03	2.10
27. Has specific techniques of coping with frustration	.44			.38			
28. Helps child with self discipline	.38	-.38		.36	-.44		
29. Attempts to inculcate acceptance of responsibility			-.52	.45			
30. Responds to consequences of act vs. intent							.59
31. Indicates verbally "school cares"			-.64				
32. Combats negative self-image			-.48				
33. Respects children's families	.62						
34. Has specific techniques for emotional problems	.40		-.37	.43			
35. Physical contact between teacher and child			-.47				

TABLE 14 (CONTINUED)

	FACTORS						
ORF ITEM % VAR .	I 9.27	II 10.73	III 11.67	IV 8.00	V 10.01	VI 2.03	VII 2.10
36. Uses techniques to develop learning enthusiasm	.47	-.42			-.37		
37. Develops acceptance of delayed goal gratification			-.50				
38. Creates atmosphere of "possibility"	.48	-.35					
39. Creates atmosphere of self-dependency	.49				-.41		
40. Uses material vs. non-material rewards							
41. Uses negative vs. positive reinforcement for learning	.51	-.45					
42. Uses negative vs. positive reinforcement for behavior	.43	-.39		.40			
43. Depends on appreciation or affection from children						.59	
44. Displays tolerance for deviant behavior	.57						

TABLE 14 (CONTINUED)

	FACTORS						
ORF ITEM	I	II	III	IV	V	VI	VII
% VAR.	9.27	10.73	11.67	8.00	10.01	2.03	2.10
45. Uses unplanned incidents for learning	.46						
46. Kind of punishment teacher uses							
47. Develops "questioning orientation"	.44				-.38		

Cognitive-Perceptual Development and Control; Factor III: Warmth and Supportiveness; Factor IV: Motor Skills and Psychological Support; Factor V: Middle Class Orientation; Factor VI: Dependency Needs and Reinforcement. Factor VII was deemed to be uninterpretable.

Because it was considered necessary to examine the stability of ORF factors across time, second observations were made in various Head Start classes and an image analysis was performed on the data so obtained. The results which emerged are presented in Tables 12 and 13. Finally, after the second observations were subjected to image analysis, a factor matching analysis was performed by Kaiser's method, the results being presented in Table 15.

The results obtained by the factor matching experiment indicated that the image analysis factors in the ORF were stable ones. Indeed, they may well be more reliable than were the original ORF scales for which reliability figures appeared in Table 10. New ORF scale reliability studies are presently being carried out, and the results of these studies should be available within a short time.

TABLE 15

MATCHING OF TWO IMAGE ANALYSIS MATRICES (COSINES OF VECTORS)

		Final Observation Factors						
		1	2	3	4	5	6	7
initial observation	1		-.8941					
	2			-.9043				
	3				.6214			
	4	-.9831						
	5					.6393		
	6							.6470
	7						.8709	

CHAPTER III

STUDIES EMPLOYING THE OBSERVER'S RATING FORM FOR PREDICTING COGNITIVE CHANGES IN SUMMER, 1965, HEAD START CHILDREN

The Observer's Rating Form (ORF) was employed in a major study by Linn (1966) as part of the present program of evaluation research. Essentially, Linn hypothesized that certain measurable changes in the cognitive functioning of 1965 Summer Head Start children in Texas would be found to be significantly related to the behavior of teachers as measured by the factor-analytically derived scales of the ORF. The sample employed in Linn's research consisted of 103 Head Start pupils, and it included Anglo-American, Latin-American, and Negro children from Head Start Centers in forty Texas communities.

The prediction models generated by Linn allowed the basic hypothesis to be tested by multiple linear regression methodology. In the first instance, the model tested included the following criteria and predictors:

Criteria

1. Peabody Picture Vocabulary Test:
   Children's difference scores
2. Preschool Inventory (PSRC 70-item form)
   Children's raw difference scores (5 scales)

TABLE 16

PREDICTIONS OF CHANGES IN THE COGNITIVE FUNCTIONING OF HEAD START CHILDREN FROM TEACHER BEHAVIOR FACTORS OF THE _ORF_ AND SELECTED TEACHER ATTITUDES AND NEEDS

Criterion Scales	R	R^2	F	P
1. Difference scores on _Peabody Picture Vocabulary_	.51	.26	3.191	.002**
2. Caldwell's _Preschool Inventory_, Scale I Quantitative Difference Scores	.34	.11	1.187	.309
3. _Preschool Inventory_ Scale II (Unnamed) Difference Scores	.43	.19	2.12	.030*
4. _Preschool Inventory_ Scale III (Control & Following Directions) Difference Scores	.37	.14	1.42	.190
5. _Preschool Inventory_ Scale IV (Verbal-Social) Difference Scores	.37	.14	1.49	.154
6. _Preschool Inventory_ Scale V (Developmental) Difference Scores	.38	.14	1.54	.143

*p less than .05

**p less than .01

Predictors

1. The original factor-analytically based ORF scales' raw scores.
2. Teachers' "Irritability" total scores (IRCOPPS Form 11b1).
3. Teachers' scores on Needs for Assistance Inventory (IRCOPPS Form 19a).

From Linn's study, which produced the statistically significant correlations (predictions) shown in Table 16, it must be concluded that the Observer's Rating Form may hold considerable promise as a predictor of the cognitive changes in socially disadvantaged children which were measured by the difference between pre-tests and post-tests made with the criterion tests.

In an investigation which was constructed in a manner quite similar to the study described immediately above, teachers' behavior scores obtained with the ORF were employed in combination with scores from selected scales developed by Pierce-Jones (1965) for IRCOPPS to measure teachers' attitudes toward children's behavior problems and their own needs for help in managing such problems. This entire set of measures of teachers was tested by multiple linear regression methodology for its effectiveness in predicting ("explaining") observed variance in the amounts of cognitive change shown by the teachers' Head Start pupils. The specific criteria of interest and the particular measures viewed as potentially useful predictors in this study were the following:

Criteria:

1. Peabody Picture Vocabulary Test
   Changes in children's raw scores
2. Sequin Form Board
   Changes in children's scores in seconds
3. Preschool Inventory
   Differences in children's raw scores (5 scales)

Predictors:

1. Teachers' scores on eight ORF scales
2. Teachers' Minnesota Teacher Attitude Inventory scores
3. Scores on 5 "Mental Health Promoting Behavior" factors measured by the IRCOPPS Form 12C, Dimensions of Teachers' Opinions developed by Pierce-Jones (1965)
4. Scores on IRCOPPS Form 11b1, Behavior Classification Checklist, developed by Pierce-Jones (1965)
5. Need for Assistance scores of teachers as measured by IRCOPPS Form 19a developed by Pierce-Jones (1965)
6. Teachers' scores on Child Attitudes Survey, IRCOPPS Form 15a (cf., Pierce-Jones, 1965)

The results obtained by multiple linear regression analysis applied to the model described above are presented in Table 17. From these results it can be seen quite readily that measured changes in Summer 1965 Head Start children were indeed related to the characteristics of their teachers which were treated as predictors.

TABLE 17

CHANGES (DIFFERENCES) IN COGNITIVE FUNCTIONS OF HEAD START CHILDREN PREDICTED FROM OBSERVED TEACHER BEHAVIOR FACTORS MEASURED BY THE ORF AND FROM CERTAIN ATTITUDES

Criterion Scales	R	R^2	F	P
Peabody Picture Vocabulary Difference Scores	.66	.43	2.36	.003**
Sequin Form Board Differences in Seconds	.69	.47	2.74	.000**
Preschool Inventory Scale I (Quantitative) Difference Scores	.43	.18	0.69	.850
Preschool Inventory Scale II (Unnamed) Difference Scores	.53	.28	1.19	.270
Preschool Inventory Scale III (Control) Difference Scores	.64	.40	2.08	.008**
Preschool Inventory Scale IV (Verbal-Social) Difference Scores	.68	.47	2.72	.001**
Preschool Inventory Scale V (Developmental) Difference Scores	.64	.40	2.08	.008**
df = 25 & 77				

**P less than .01

Moreover, it appears from Tables 16 and 17 that measures of the Head Start teachers' attitudes and values, combined with the ORF measures, added appreciably to our effectiveness in predicting cognitive changes in socially and educationally disadvantaged children.

In still another of the studies conducted under the present program of research, we were able to study the relationship not only of teacher behavior and attitudes (as already de-described) but also of children's pretest scores to changes in their test performances occurring between pretest and post-test. The pretest and the post-test measures made on the children included the Peabody Picture Vocabulary Test, the Sequin Form Board, the Preschool Inventory, and the Bender Visual-Motor Gestalt Test . By combining the teacher variables already listed (above), with the children's pretest scores, even more effective predictions of cognitive changes in the children were obtained. Table 18 shows that substantial failure to predict changes in the children sampled occurred only when changes on the first, or Quantitative, scale of the Preschool Inventory constituted the target criterion.

It has long been recognized by psychologists that one of the best predictors of the future status of a child is a measure of his past performance in the same behavior domain. The results presented in Table 18 surely serve to reinforce this hoary gener-

TABLE 18

CHANGES (DIFFERENCES) IN HEAD START CHILDREN'S COGNITIVE FUNCTIONS PREDICTED FROM ORF SCORES, TEACHER ATTITUDES & CHILDREN'S INITIAL (PRETEST) SCORES

Criterion Scores	R	R^2	F	P
Peabody Picture Vocabulary Difference Scores	.82	.68	4.16	.000**
Seguin Form Board Difference in seconds	.88	.77	6.76	.000**
Preschool Inventory Scale I (Quantitative) Difference Scores	.57	.33	0.87	.520
Preschool Inventory Scale II (Unnamed) Difference Scores	.75	.56	2.52	.001**
Preschool Inventory Scale III (Control) Difference Scores	.78	.61	3.18	.000**
Preschool Inventory Scale IV (Verbal-Social) Difference Scores	.80	.64	3.58	.000**
Preschool Inventory Scale V (Developmental) Difference Scores	.65	.43	1.50	.08
df = 34 & 69				

**Statistical significant; P = .001 or less alization. But it is surely of major interest, nonetheless, that measurements of teacher behavior factors, obtained by direct observations made in Head Start classrooms, could be made with substantial reliability and that they served to enhance the adequacy with which cognitive changes in disadvantaged children could be explained. It is evident from our results that the behavior of a child's teacher does make a difference to him, when his intellectual growth is at issue, as, of course, does his own initially attained level of cognitive development.

In the final study in the series reported in this Chapter, Linn (1966) studied the possibility that the variance in teacher behavior, measured by ORF scales, reflected antecedent differences in the demographic and personal characteristics of the teachers. The following operational model was generated to test Linn's hypothesis by means of the multiple linear regression technique.

Criteria

1. Teachers' obtained scores on 8 ORF scales
2. Teachers' "Irritability" scores on IRCOPPS Form 11B1
3. Teachers' manifest Needs for Assistance scores on IRCOPPS Form 19a

Predictors

1. Ethnic group membership of the teacher
2. Marital status of the teacher
3. Community size of teacher's home
4. Socio-economic status of teacher's childhood family

5. Regularity of teacher's religious (church) attendance
6. Years of experience in teaching
7. College grade point average reported by the teacher

The results obtained in this aspect of the research by Linn are reported in Table 19. Taken as a whole, these results lend support to the hypothesis that some aspects of teacher behavior were potentially predictable from knowledge of previously existing variations in teachers' demographic and personal attributes. With the exception of ORF Scale VI, Positive vs. Negative Reinforcement, all other members of the criterion set were predicted sufficiently well to support the hypothesis at issue. In this connection, it should be recalled that ORF Scale VI was the least reliable of the eight teacher behavior observational measures employed, so effective prediction of its variance should have been attenuated in any event.

TABLE 19

PREDICTIONS OF OBSERVED (ORF) TEACHER BEHAVIOR VARIATIONS FROM DEMOGRAPHIC AND PERSONAL CHARACTERISTICS OF HEAD START TEACHERS

Criterion Scores Predicted	R	R^2	F	P
ORF Scale I: Stimulating Cognitive Development	.41	.17	1.770	.069
ORF Scale II: Providing Warmth-Supportiveness	.35	.12	1.205	.292
ORF III: Showing Respect for Children	.37	.14	1.451	.162
ORF Scale IV: Stimulating Motor Skills...	.39	.15	1.601	.110
ORF Scale V: Dependency Needs of Teacher	.43	.19	2.007	.035*
ORF Scale VI: ...Reinforcement	.26	.07	0.621	.807
ORF Scale VII: Perceptual-Emotional Control	.35	.13	1.282	.246
ORF Scale VIII: Middle-Class Orientation	.41	.17	1.817	.061
PSRC:1181, Irritability: Total Score	.39	.15	1.555	.124
PSRC 19a, Needs for Assistance: Total Score	.37	.14	1.445	.165

df = 11 & 98

*Statistically significant; P = .05 or less

CHAPTER IV

PREDICTING ORF-MEASURED TEACHER BEHAVIOR FROM SETS OF TEACHER CHARACTERISTICS AND PUPIL ATTRIBUTES

The general conceptual model (cf., Page 6, this Report) basic to our research program considered that a Head Start class's "program input"--conceived as teaching behavior and measured by the eight original ORF scales--would be related to certain previously assessed characteristics of the teachers operating in concert with the characteristics of the children in their classes. In other words, teaching behavior was viewed as stemming from the "combined properties" of the teacher as a "cultural agent" and of the children as active participants in the acculturation processes occurring, in this instance, in Head Start classes.

To test the aforestated highly general notion, and related ones, in at least a preliminary way, multiple linear regression (prediction) analyses were made of our data for the number of cases in our sample for whom all data needed were available. In certain instances, the number of cases for whom complete data were in hand was only 63. The attrition in sample size from the 1250 teachers originally tested at the Head Start teacher training sessions at The University of Texas apparently was due to the fact that the subsequent centers-sampling procedure (selection of a random sample of 70 Head Start centers in 40 Texas communities) and the sampling of children in the classes sampled operated together not only to reduce the total number of teachers observed but also to introduce a substantial number of teachers (into the observed sample) who had been trained in sessions at Southern Methodist University.

It seems highly likely that the small number of cases prejudiced our achieving statistically significant multiple correlation coefficients pertaining to our hypotheses even when, numerically, the obtained multiple R's were very high. This point will be reasserted at a later point in this Chapter, after relevant results have been presented.

Is ORF-Measured Behavior Predictable from Pretest Measure of Children's Cognitive Attributes?

A key hypothesis to be tested in our research statement was that one which is implied directly by the question at the head of this section. To test the hypothesis by the multiple regression technique, the eight original ORF scale scores for 63 teachers were taken as criteria. The following predictors were selected:

Predictors

Pretest Scores of Children on the

1. Peabody Picture Vocabulary Test
2. Sequin Form Bond
3. Bender Visual Motor Gestalt Test
4. Preschool Inventory (5 scales)

Measures of Teachers' Characteristics

1. Minnesota Teacher Attitude Inventory
2. Dimensions of Teachers' Opinions (IRCOPPS, 5 scales)
3. Behavior Classification Checklist (Irritability Score)
4. Needs for Assistance Inventory (IRCOPPS, 19a)
5. Child Attitudes Survey (IRCOPPS, 15a, 2 scales)

The results of the multiple regression prediction studies required to test the hypothesis of interest in this section are shown in Table 20. Clearly, judging from the probability values of the multiple correlations (cf., Table 20), none of the R's in the Table was high enough to be accepted as a nearly non-chance occurrence. On the other hand, the values of R, and, therefore, the percentages of criterion variance accounted for by the predictor measures employed, were high enough to encourage the belief that the hypothesis being tested should be further, and more systematically, examined with a larger sample of cases. In other words, despite the canons of statistical nicety, it would appear from our studies that there is a considerably better than chance probability that teacher behavior (as measured by ratings anchored in direct observations) is a function of the teacher's characteristics and the pupils' attributes operating jointly.

TABLE 20

MULTIPLE CORRELATIONS AND PERCENTAGES OF ORF CRITERION VARIANCE ACCOUNTED FOR BY A COMBINATION OF MEASURED TEACHER AND PUPIL ATTRIBUTES USED AS PREDICTORS

Criteria		R	% Variance	P
ORF I:	Stim. Cog. Devt.	.69	47	.27
ORF II:	Providing Warmth	.63	39	.61
ORF III:	Showing Child Respect	.69	47	.27
ORF IV:	Encourage Motor Skills	.61	37	.70
ORF V:	Teachers' Dependency	.66	43	.44
ORF VI:	Providing Reinforcement	.63	40	.59
ORF VII:	Stim....Emot. Control	.71	51	.16
ORF VIII:	Middle Class Orient.	.65	43	.45

When the results presented in this Chapter are viewed together with the findings reviewed in Chapter III, it becomes apparent that neither the makeup of the teacher, the classroom behavior of the teacher, nor the attributes of pupils can be ignored if we are to gain an increased understanding of the intricacies of effective compensatory teaching for disadvantaged children.

Predicting ORF-Measured Criterion Behavior from Teachers' Attitudes, Opinions, and Needs for Help

The concluding note in the preceding section becomes, perhaps, a slightly more resonant one when a final ORF prediction study is considered. The proposition was made in our overriding paradigm that, apart from its dependence on pupils' attributes, a teacher's observed teaching behavior is independently influenced by factors in her own life history and environment and by her attitudes, opinions, and "needs." This is the hypothesis on which the results found for 63 teachers, presented in Table 21, come to bear. Again, of course, the number of teachers involved in the analysis was so small as to prejudice the finding of "statistically significant" multiple correlation coefficients, even though their absolute numerical values were relatively high.

In the present analysis the criteria to be predicted were, again, the scores on eight ORF factor-based scales. The predictor instruments employed were:

TABLE 21

MULTIPLE REGRESSION PREDICTIONS OF TEACHERS' (N=63) ORF-MEASURED BEHAVIOR FROM SCORES ON SELF-REPORT MEASURES OF TEACHERS' ATTITUDES

Criteria		R	% Variance	P
ORF I:	Stim. Cog. Devt.	.59	35	.17
ORF II:	Providing...Support	.52	27	.52
ORF III:	Showing...Respect	.61	37	.11
ORF IV:	Stim. Motor Skills	.45	20	.83
ORF V:	Teacher Dependency	.55	30	.37
ORF VI:	Reinforcement	.51	27	.52
ORF VII:	Encouraging Control	.61	38	.11
ORF VIII:	Middle Class Orientation	.55	31	.32

1. Teachers' Minnesota Teacher Attitude Inventory scores
2. Teachers' Dimensions of Teacher Opinions (IRCOPPS, 12c) scores on 5 "Mental Health Promoting Behavior" factors
3. Teachers' total "irritability" scores on the Behavior Classification Checklist (IRCOPPS Form 11b1)
4. Teachers' scores on 8 scales of the Needs for Assistance Inventory (IRCOPPS Form 19a)
5. Teachers' scores on 2 scales of the Child Attitudes Survey (IRCOPPS Form 15a)

The pertinent multiple correlation coefficients, percentages of overlapping criterion-predictor variance, and relevant probability values are presented in Table 21. While the results shown in Table 21 do not meet the conventional requirements (P = .05) for statistical significance (virtually non-chance occurrence), they are based on small samples of cases, as was pointed out earlier, and thus may be regarded as provocatively suggestive that our hypothesis might not be erroneous if tested systematically with a larger number of teachers. Indeed, the percentages of criterion variance "accounted" for by the predictor measures of antecedently developed attitudes and needs relative to children are substantial and interesting.

When the findings in Table 21 are viewed in conjunction with those in Table 19 (Chapter III) pertaining to the prediction of the eight _ORF_ criteria from demographic and personal data for 110 Head Start teachers, it is evident that further study is imperative in order to establish adequately the relationships of teachers' attitudes, demography, and personal histories to variance in their directly observable (_ORF_) classroom teaching behavior "styles."

CHAPTER V

DESCRIPTIVE AND PREDICTION STUDIES OF COGNITIVE CHANGES IN SUMMER, 1965, HEAD START CHILDREN

In Chapter 3, substantial amounts of statistical evidence were brought to bear on the general issue of the predictability of measurable intellectual and related kinds of changes which occurred in a Texas-wide sample of Summer, 1965, pupils enrolled in Project Head Start classes. The studies presented in Chapter 3 dealt chiefly, however, with the predictability of changes in children from direct observational measures (ORF) of Head Start classroom teaching behavior factors. Chapter 4, in turn, brought evidence to bear on the hypothesis that teaching behavior, as measured by the ORF, could be predicted from other measures of both teachers and children. This Chapter is devoted to examining in further detail the measurable cognitive changes which Summer, 1965, Head Start children were found to experience.

The Relationship of Intellectual Change to the Temporal Interval Between Testing and Retesting Pupils

An investigation was carried out by Pierce-Jones, Friedman, and Caldwell, as part of the present research program, which tested the hypothesis that Head Start experience may have contributed to significant changes in measurable attributes of children's cognitive functioning. In addition, it tested the related hypothesis that such changes could be related to the temporal amount (in days) of Head Start experience which children had undergone between the date on which they were initially tested by trained examiners and the date on which they were retested.

Method

One hundred twenty-six children enrolled in 70 Head Start Child Development Centers in 40 Texas Communities were examined relatively early and, a second time, relatively late in their Summer, 1965, Head Start periods. Negro-, Latin-, and Anglo-American children were included in the sample tested. The examiners were skilled psychometrists; they included Anglo-, Negro-, and Latin-American men and women. Spanish-speaking as well as English-speaking examiners were employed. Tests were administered in colloquial Spanish whenever this was necessary. The time interval between "early" tests and "late" tests ranged from 11-29 days; the median number of days was 14.

Changes in raw scores were subjected to analysis of variance procedures to determine (1) if the first and second testings of all 126 children were significantly different, and (2) if first and second test scores were significantly different as a result of the length of time between the two tests. Thirty-five subjects were tested twice, with an interval of 10-13 days; the interval of 34 other subjects was 14-18 days; the intertest period for another 31 subjects was 19-22 days; and, for 26 subjects, the period was 23-29 days.

The tests administered to the children were (1) the Peabody Picture Vocabulary Test, (2) the Sequin Form Board, and (3) a shortened (70 item) form of Caldwell's Preschool Achievement Inventory. The first of these tests measured children's verbal ability; the second measured visual-perceptual ability; the third instrument tested a conglomerate of factors of intellectual, verbal, quantitative, and other abilities involved in "school readiness" and intellectual development.

Results

The mean scores and P-values obtained from the five analyses of variance outlined above are shown in Table 22. In the first comparison, that involving "early" and "late" tests of all 126 children, the differences were clearly statistically reliable, and in the expected direction, on both the Peabody Picture Vocabulary Test (PPVT) and Caldwell's Preschool Inventory (PSI) ($P < .001$ in each case). The obtained score difference on the Sequin Form Board (SFB) was not statistically significant.

When sub-groups were classified by the length of the temporal interval between each subject's "early" and "late" testing, the means shown in Table 22 for these groups were found. Significant differences between PPVT means were found for the 14-18 day retest subjects and for those retested at 23-29 days. The trend was toward significance ($P <.05$) for the 10-13 day retest means on the PPVT, but did not quite reach it.

TABLE 22

Changes of Scores Between "Early" and "Late" Testings with Peabody Picture Vocabulary, Sequin Form Board, and Preschool Inventory for all Subjects and for Time Interval Groups

Groups	Mean Scores PPVT			Mean Scores SFB			Mean Scores PSI		
	Test 1	Test 2	P	Test 1	Test 2	P	Test 1	Test 2	P
All Ss (N = 126)	45.93	47.85	.00	28.56	28.15	NS	43.79	45.56	.00***
10-13 days (N = 35)	47.94	49.51	NS	28.71	26.83	NS	46.40	48.49	.00***
14-28 days (N = 34)	44.74	47.94	.05	25.59	31.06	.09	42.03	44.24	.00***
19-22 days (N = 31)	48.52	48.06	NS	32.77	26.00	.00	44.00	44.16	NS
23-29 days (N = 26)	41.69	45.23	.05	27.23	28.69	NS	42.31	45.04	.00***

*** Significant at $P < .001$

The difference between PPVT retest means for the 19-22 day group was not a dependable one.

No clear trend was evident for any of the statistical comparisons made for test-retest data on the Sequin Form Board, although the absolute numerical differences between means differed in the desired direction in 3 of 5 comparisons, *i.e.*, for test-retest differences in means obtained with an intertest interval of 14 or more days.

The differences shown in Table 22 for Preschool Achievement Inventory comparisons were statistically significant ($p < .001$) in 4 of 5 instances, the only exception noted being for the 19-22 day intertest interval. All differences between Preschool Inventory means were in the desired and expected direction.

Discussion and Conclusions

The results obtained in this study, and shown both in Table 22 and in Figure 2, lead almost inevitably to the conclusion that the levels of cognitive functioning of Head Start children (as measured by the Peabody Picture Vocabulary Test and the Preschool Achievement Inventory) improved significantly between an initial and a later examination by skilled examiners. The results for the Sequin Form Board were equivocal, but did not suggest that any reliable change was measured by this instrument.

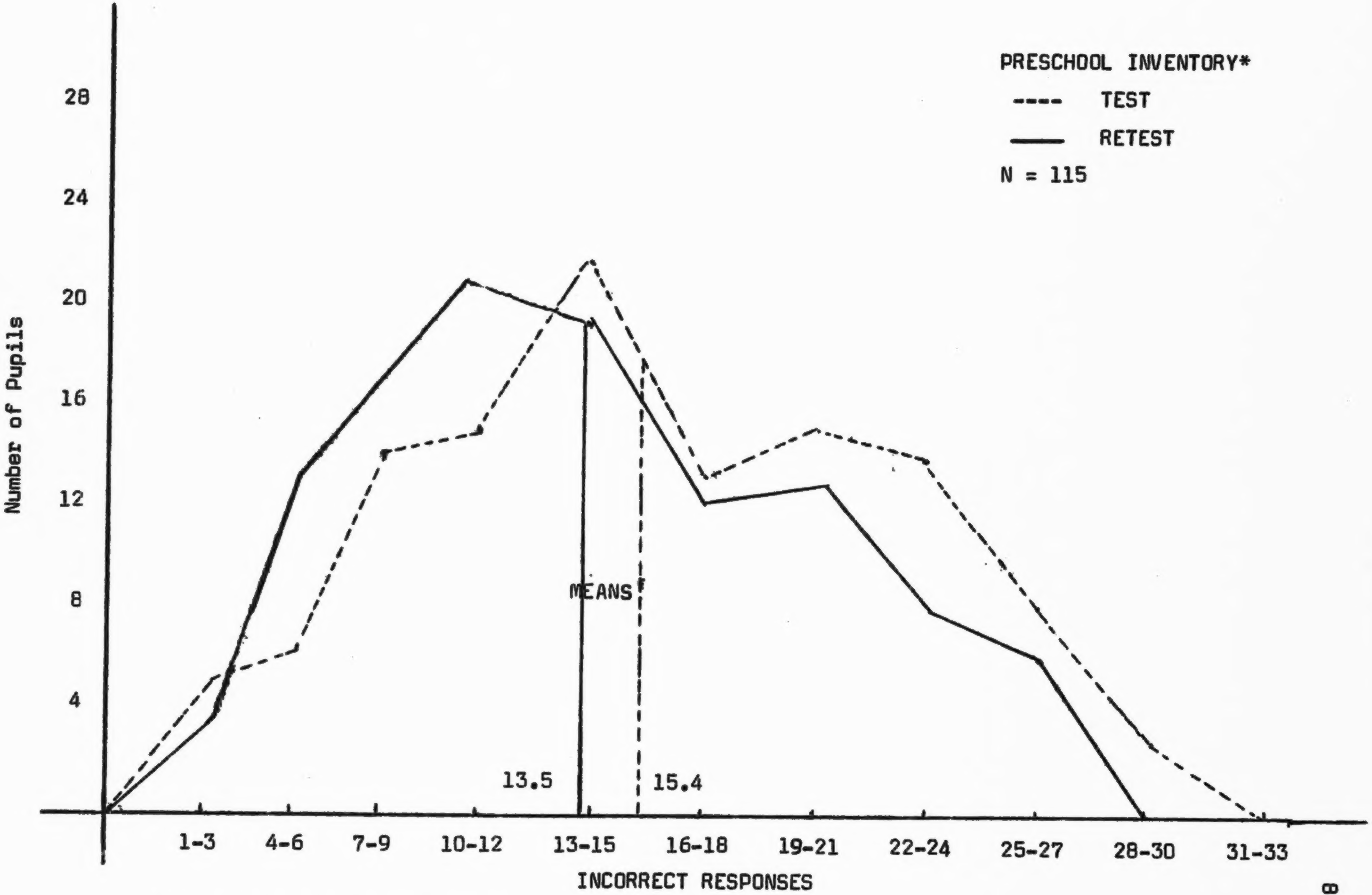

Fig. 2-Test-Retest Distributions of Error Scores on Preschool Inventory
--Notice Difference Between Error Means is in Desired Direction

It well may be wondered (1) if real cognitive change occurred in these children; (2) if the children attained greater sophistication in testing situations; (3) if they showed simply "practice effects" from repeated testing; or (4) if they were, perhaps, coached in their classes for these tests. Our data are not adequate to resolve this issue clearly. However, it may be noted that others who tested 1965 Head Start children _and_ comparable control children did find significant differences between the two groups on such tests as the _Peabody_. We are disposed, on such grounds, as well as on others discussed below, to think that the changes we have found are real ones rather than mere statistical artifacts.

A Comparison Study of Head Start vs. Non-Head Start Children

A comparison (but probably not a true "control") sample of non-Head Start children was obtained in the autumn of 1965. This sample included 188 males and 167 females who were in the first grade in communities where our Head Start sample was selected. They had _not_ participated in Head Start programs but _were_ older when tested than was the Head Start sample. Comparison children were tested in their schools using the same instruments as were employed with the Summer Head Start children. All examinations were made during the eighth week of the comparison group's first-grade work. The children selected were chosen to be tested, by their first-grade teachers, as children who should have been eligible for Head Start. Two-way analyses of variance were performed on the data to test differences due to sex and group membership (Head Start _vs_. Comparison), the categorical divisions employed for analytic purposes.

The results obtained for the _Peabody Picture Vocabulary Test_ (Tables 23 and 24) indicated that no statistically dependable differences occurred between the Head Start children's performance and that of the non-Head Start children in the comparison group. There was, however, a significant difference between the performances of males and females (in favor of males).

All instruments administered, other than the _Peabody_, showed the _Head Start children_ to have performed at a _significantly higher_ level than did the comparison sample of non-Head Start children. Such differences held for the _Preschool Inventory's_ Scale I: Quantitative (Tables 25 and 26); Scale II: Unnamed (Tables 27 and 28); Scale III: Control and Following Directions (Tables 29 and 30); Scale IV: Verbal-Social (Tables 31 and 32); and Scale V: Developmental Increments (Tables 33 and 34). From these differences, which are quite improbably chance occurrences, it is clear that children who participated in Head Start performed at a substantially higher level on the 5 scales of the _Preschool Inventory_ than did a comparison group of Texas first-graders who had not participated in Head Start. Moreover, the Head Start

TABLE 23

Analysis of Variance to Test Hypothesis That Sex of Pupil and Amount of Head Start Experience Influenced *Peabody Picture Vocabulary Test* Scores

Source	M.S.	df	F	P
Total	122.781	480		
Between	512.469	3		
A (sex)	1365.790	1	11.3504	.0012*
B (group)	13.217	1	.1098	.7399
A X B	158.399	1	1.3164	.2504
Within	120.330	477		

TABLE 24

Mean Peabody Picture Vocabulary Test Scores of Boys and Girls With and Without Head Start

Group	Mean PPVT Score
All Male Children	49.87
All Female Children	46.04
All Head Start Children	47.77
All non-Head Start Children	48.14
Male Children - Head Start	50.34
Female Children - Head Start	45.20
Male Children - non-Head Start	49.41
Female Children - non-Head Start	46.88

TABLE 25

Analysis of Variance Showing Influences of Sex and Group (Head Start *vs.* non-Head Start) on *Preschool* I (Quantitative) Scores

Source	Mean Squared	df	F	p
Total	22.04	480		
Between	80.58	3		
Sex	112.70	1	5.20	.02*
Group	128.89	1	5.95	.01*
Sex X Group	.14	1	.01	NS
Within	21.68	477		

* $P < .05$

TABLE 26

Means for Sex and Head Start vs. non-Head Start Groups of Preschool Scale I (Quantitative) Scores

Groups	Means
Males	19.00
Females	17.91
Head Start	19.05
non-Head Start	17.87

TABLE 27

Analysis of Variance Showing Influence of Head Start Experience on Preschool II (Personal-Social Responsiveness)

Source	Mean Squared	df	F	p
Total	9.62	480		
Between	875.64	3		
Sex (A)	.37	1	.09	.76
HS vs. non-HS (B)	2626.43	1	629.37	.00*
A X B	.13	1	.03	.86
Within	4.17	477		

* P <.001

TABLE 28

Means for Head Start and non-Head Start Children on

Preschool Scale II (Personal-Social Responsiveness)

Groups	Means
Head Start	11.67
non-Head Start	6.35

TABLE 29

Analysis of Variance Testing Influences of Sex and Head Start Experience on _Preschool_ Scale III

(Control...Directions)

Source	Mean Squared	df	F	p
Total	16.39	480		
Between	141.55	3		
Sex (A)	.14	1	.009	.92
Head Start Group (B)	412.41	1	26.427	.00*
A X B	12.10	1	.77	.61
Within	15.61	477		

* $p < .001$

TABLE 30

Means for Head Start Groups of Preschool Scale III (Control...Directions) Scores

Group	Means
Head Start	21.82
non-Head Start	19.71

TABLE 31

Analysis of Variance Testing Influences of Sex and Head Start Experience on Preschool Scale IV (Verbal-Social)

Source	Mean Squared	df	F	p
Total	14.57	480		
Between	166.73	3		
Sex (A)	20.03	1	1.47	.22
Head Start Group (B)	479.14	1	35.19	.00*
A X B	1.01	1	.07	.78
Within	13.62	477		

* $p < .01$

TABLE 32

Means of Head Start Groups on Scale IV of Preschool

(Verbal-Social)

Group	Means
Head Start	10.04
non-Head Start	7.77

TABLE 33

Analysis of Variance Testing Influences of Sex and Head Start Experience on Preschool Scale V Scores (Developmental Increments)

Source	Mean Squared	df	F	P
Total	41.78	480		
Between	233.73	3		
Sex (A)	107.20	1	2.64	.10
Head Start Group (B)	593.97	1	14.64	.00*
A X B	.005	1	.00	.98
Within	40.57	477		

* P <.001

TABLE 34

Mean Scores on Preschool V (Developmental Increments) for Head Start Experience Groups

Group	Means
Head Start	24.44
non-Head Start	21.91

children's performances differed in a favorable direction from those of the non-Head Start children.

Overall, these differences indicated that Head Start children well may have entered the first grade with fewer deficiencies and greater readiness to learn than did other "disadvantaged" first graders--those who had not been in Summer Head Start classes. It is also conceivable, of course, that the Head Start children, more often than the comparison sample of first-graders, came from less disadvantaged circumstances originally, although the efforts which were made to enroll Head Start eligible children in the summer of 1965 were intensive and, seemingly, highly effective.

Effects of Head Start Programs On The Test-Retest Variance Found Among Head Start Children

It has been made evident (above) that Head Start children appear really to have changed, on the average and in important characteristics, in association with Summer, 1965, Head Start experience. It can also be asked, however, if Head Start children became more or less heterogeneous in their intellectual functioning.

To answer this question, test-retest variance ratios for 126 children who participated in Project Head Start were studied in our research program. The sample of children was randomly selected but was stratified both according to geographical location in Texas and according to urban vs. rural distribution. The cognitive and perceptual-motor tests used were: (1) the Peabody Picture Vocabulary Test, (2) the Sequin Form Board, and (3) the 5 scales of the Preschool Inventory. The results are presented in Table 35 .

From the results shown in Table 35, it may be seen that the variance ratios were statistically significant in 2 comparisons, i.e., that involving the Sequin Form Board and that involving the Preschool Inventory, Scale II. It should also be observed that the variance ratio for the Peabody Picture Vocabulary Test approached statistical significance ($P < .05$). These three substantial variance ratios, however, do not represent variance changes in the same direction. The variances of Peabody and Sequin Form Board scores decreased considerably from the first testing to the second, while the variance found with the Unnamed, or Personal-Social Responsiveness, Scale of the Preschool Inventory almost doubled.

The Peabody Picture Vocabulary Test requires a pointing response from the child to the spoken names of pictures presented by an examiner. Perhaps few children in the Head Start sample had been exposed previously to similar materials and tasks. Therefore, Head Start programs may have emphasized this kind of activity and, further, may have geared these activities to the lower levels of the classes. Thus, the children who scored in the upper limits of the sample appear to have remained at

TABLE 35

Comparison of Test *vs.* Retest Variances of 126 Pupils' Criterion Scores

	Test Variance	Retest Variance	F	p*
Peabody Picture Vocabulary Test	143.67	107.25	1.34	.103**
Sequin Form Board	256.58	126.35	2.03	.001***
Preschool Inventory				
I (Quantative)	22.80	22.27	1.02	.895
II (Unnamed)	4.91	8.81	1.80	.002***
III (Control and following directions)	11.36	13.30	1.17	.380
IV (Verbal-Social)	11.73	11.36	1.03	.858
V (Developmental)	37.55	38.65	1.03	.872

*Two-tailed tests
**Approaches significance
***P<.01

approximately the same level, but children who scored lower seemingly increased their scores on the second testing. This explanation seems to account for the obtained decrease in variance. A similar explanation is possible, although perhaps less acceptable, for the decrease in variance on the Sequin Form Board.

An increase in variance was noted on the Preschool Inventory, Scale II*. This scale is unnamed, but it contains items which require the child to give his name, the names of other children in his class, and their last names; and to trace from one object to another. At the first testing, few children should have known the names of the other children in the class. However, at the later testing, the children probably knew the names of at least some of the other children in the class, as well as other information. The number of names and the degree of other information that a child had acquired should have depended upon his interactions with others and upon areas of individual emphasis provided by his particular teacher. Thus, the variance should have been expected to decrease on Scale II of the Preschool Inventory.

As we have seen, children who participated in Project Head Start showed changes in their average performances and in their test-retest variability on several examinations. Moreover, the literature, as well as our own work (this Report), suggests that teacher behavior, background experience, and developed attitudes are related to the child's performance, his perception of himself, his acceptance in the classroom, and similar characteristics.

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*This scale (II) of the Preschool Inventory was not named in the Summer of 1965, when we employed it in our investigations. More recently, Caldwell and Soule appear to view the scale as measuring a factor construct called "Personal-Social Responsiveness."

Triple classification analyses of variance were performed in order, deliberately, to study the interaction of certain independent variables which might well have affected the performance of Head Start children. Comparisons, thus, were made of the children's difference (change) scores on the Peabody Picture Vocabulary Test, and the five scales of the Preschool Inventory.

The first independent variable was the time interval between the test and retest of each child. This variable was measured in two categories: (1) retests given 10 through 18 days after the first testing, and (2) retests administered 19 through 29 days after the first testing. The sex of the child, male or female, constituted the second independent variable measured. The third independent variable was the ethnic group identification of each child's teacher, i.e., Anglo-, Latin, or Negro American.

The results of the analysis of variance in which children's Peabody Picture Vocabulary Test change scores were the measure of the dependent variable are shown in Table 36.

The only effect which approached statistical significance ($P < .05$) was that which represented the interaction of time with the

TABLE 36

Analysis of Variance: Peabody Picture Vocabulary Test

Source	Mean Squared	F-Ratio	p
Time	12.602	.2053	.6561
Child Sex	27.547	.4487	.5114
Teacher Ethnicity	84.144	1.3706	.2570
Time X Child Sex	130.421	2.1244	.1439
Time X Teacher Ethnicity	14.856	.2420	.7885
Child Sex X Teacher Ethnicity	3.908	.0637	.9380
Time X Child Sex X Teacher Ethnicity	62.074	1.0111	.3685

TABLE 36

Analysis of Variance: Peabody Picture Vocabulary Test

Source	Mean Squared	F-Ratio	p
Time	12.602	.2053	.6561
Child Sex	27.547	.4487	.5114
Teacher Ethnicity	84.144	1.3706	.2570
Time X Child Sex	130.421	2.1244	.1439
Time X Teacher Ethnicity	14.856	.2420	.7885
Child Sex X Teacher Ethnicity	3.908	.0637	.9380
Time X Child Sex X Teacher Ethnicity	62.074	1.0111	.3685

child's sex. The pertinent F-Ratio was 2.1244, and a comparison of the group means tended to show differences that were not accounted for by any single independent variable. The cross-classified means are presented in Table 37. Although not significantly different statistically, the pattern of the means in Table 37 suggested that short-interval males tended to do better on the Peabody than did long-interval males, while the opposite tended to be true for females, albeit the obtained difference was a smaller one. Short-interval males improved more than short-interval famales, while long-interval females improved slightly more than long-interval males. Moreover, short-interval males improved more than long-interval females, but long-interval males and short-interval females showed almost equal mean difference scores.

The results of the same kind of analysis made for scores on Scale I (Quantitative) appear in Table 38. In this analysis (cf. Table 38), two F-Ratios approached statistical significance, one being produced by the interaction of the child's sex with the teacher's ethnicity, the other being yielded by the triple interaction of time with child's sex and teacher ethnicity. The means of the difference scores (classified according to child's sex and teacher's ethnicity) are presented in Table 39.

TABLE 37

Means for Time X Child's Sex Groups on the Peabody Test

Time By Sex	Male	Female
Short Intertest Interval (10-18 Days)	4.6128	1.i056
Long Intertest Interval (19-29 Days)	1.4630	2.7615

TABLE 38

Analysis of Variance [Preschool I (Quantitative)]

Source of Variance	Mean Squared	F-Ratio	P
Time	.114	.0108	.9139
Child Sex	9.758	.9221	.6593
Teacher Ethnicity	4.213	.3981	.6782
Time X Child Sex	7.418	.7010	.5909
Time X Teacher Ethnicity	1.971	.1863	.8318
Child Sex X Teacher Ethnicity	23.665	2.2363	.1095
Time X Child Sex X Teacher Ethnicity	21.690	2.0497	.1314

TABLE 39

Interaction of Child's Sex with Teacher's Ethnicity

[Preschool (Quantitative) Means]

Child's Sex	Teacher Ethnicity Negro	 Latin	 Anglo
Male	1.8007	1.3214	.4583
Female	.2000	-.4375	1.8462

TABLE 40

Preschool Inventory, Scale I, Means Representing the Interaction of Time, Child's Sex, and Teacher Ethnicity on Preschool Quantitative Scores

Intertest Interval and Teachers' Ethnicity	Sex of Pupils	
	Male	Female
Short		
Negro Teachers	.4348	1.2000
Latin Teachers	2.1429	-.6250
Anglo Teachers	.2500	2.0000
Long		
Negro Teachers	3.1667	-.8000
Latin Teachers	.5000	-.2500
Anglo Teachers	.6667	1.6923

The results of the analysis of the differences obtained with Scale II (Unnamed or "Personal-Social Responsiveness") of the Preschool Inventory appear in Table 41 . These results suggest that children who were tested after a short interval of time tended to "backslide" slightly on Scale II (Personal-Social Responsiveness) of the Preschool Inventory. Children who had Negro teachers, and who were tested after a long interval, showed the most improvement. Anglo teachers' children improved slightly, and long-interval children of Mexican-American teachers backslid more than did children from any other group. The means of the difference scores on Preschool Scale II, categorized according to time, child's sex, and teacher ethnicity appear in Table 42 . These results showed that significant ($P < .05$) differences occurred between means, and these were not accounted for by any single variable by itself.

In the short-interval group, male children with Mexican-American teachers fared slightly better than did the other groups. Female children having Anglo teachers lost more ground than did others; the male children who had Anglo Head Start teachers also "backslid" slightly. Among the long-interval children, males with Negro teachers showed more improvement than did any others; children (both male and

TABLE 41

Analysis of Variance [Preschool II (Unnamed)]

Independent Variables	Mean Squared	F	p
Time	11.510	1.1794	.2794
Child Sex	10.894	1.1162	.2931
Teacher Ethnicity	16.140	1.6537	.1941
Time X Child Sex	5.598	.5736	.5431
Time X Teacher Ethnicity	25.510	2.6138	.0758
Child Sex X Teacher Ethnicity	4.387	.4495	.6449
Time X Child Sex X Teacher Ethnicity	34.022	3.4860	.0329*

*Significant at .05 level

TABLE 42

Group Means Representing the Interaction of Time With Teacher Ethnicity on *Preschool* Scale II

Time X Teacher Ethnicity	Negro	Latin	Anglo
Short Intertest Interval	-.2783	-.0268	-.6250
Long Intertest Interval	1.7500	-1.4167	.8782

TABLE 43

Means Representing the Interacting Influences of Time, Child's Sex, and Teacher Ethnicity on "Personal-Social Responsiveness" (*Preschool Inventory*)

Intertest Interval Means	Sex of Pupils	
	Male	Female
Short		
Negro Teachers	-.9565	.4000
Latin Teachers	.5714	-.6250
Anglo Teachers	-.2500	-1.0000
Long		
Negro Teachers	4.0000	-.5000
Latin Teachers	-1.8333	-1.0000
Anglo Teachers	.8333	.9231

female) whose teachers were of Mexican descent decreased in performance; and long-interval children with so-called Anglo teachers tended to gain slightly.

The results of our analyses of the available data for Scale III (Control and Following Directions) of the Preschool Inventory are given in Table 44. The only independent variable that produced a main order effect on test-retest difference scores which approached statistical dependability was teacher ethnicity. The pertinent group means are presented in Table 45. The difference score means found for the children having Latin- and Anglo-American teachers showed slight, but almost equal, decreases. The children who had Negro teachers, however, showed an even greater decrease. Additional study will surely be required in this case before an adequate interpretation can be made of the results.

Analyses of differences found with the Preschool Inventory. Scale IV (Verbal-Social) did not show any variations which approached statistical significance, but the analysis of Preschool Inventory Scale V difference scores produced one result which merits presentation in Table 46. Of short interval children, males having teachers of Mexican heritage earned higher difference scores than did other groups. However, female children with Latin-American teachers "backslid" to achieve a negative score (on the average) on Scale V.

TABLE 44

Analysis of Variance: Preschool III, Control and Following Directions

Independent Variables	Mean Squared	F	P
Time	11.015	.7273	.59
Child's Sex	11.416	.7538	.60
Teacher Ethnicity	45.323	2.9927	.05
Time X Child's Sex	22.586	1.4913	.22
Time X Teacher Ethnicity	2.720	.1796	.83
Child's Sex X Teacher Ethnicity	18.780	1.2400	.29
Time X Child's Sex X Teacher Ethnicity	.301	.0199	.98

TABLE 45

Means Representing the Effect of the Ethnicity of Teachers on Preschool Inventory, Scale III, "Control"

Negro	Latin	Anglo
-2.1933	-.0565	-.0807

TABLE 46

Analysis of Variance: Preschool Inventory, Scale V "Developmental Increments"

Independent Variables	Mean Squared	F	P
Time	3.098	.1631	.6899
Child Sex	23.515	1.2383	.2673
Teacher Ethnicity	26.882	1.4156	.2458
Time X Child Sex	2.852	.1502	.7012
Time X Teacher Ethnicity	22.546	1.1873	.3087
Child Sex X Teacher Ethnicity	38.315	2.0177	.1356
Time X Child Sex X Teacher Ethnicity	52.279	2.7530	.0662

TABLE 47

Means Representing Interaction of Time With Child's Sex and Teacher Ethnicity on Preschool "Developmental" Scale

Intertest Difference Means	Males	Females
(Short Interval)		
Negro Teachers	-.3478	1.5500
Latin Teachers	3.1429	-1.5000
Anglo Teachers	.7500	1.5000
(Long Interval)		
Negro Teachers	3.5000	-1.3000
Latin Teachers	-.8333	2.2500
Anglo Teachers	.8333	2.9231

Other groups tended to gain slightly, except for the male children taught by Negro teachers. In the latter case, however, only a slightly depressed mean difference was noted. For long-interval children, the greatest amount of improvement was shown by male pupils with Negro teachers. Following that were female children having Anglo- and/or Latin-American teachers. Females with Negro teachers showed the most depressed scores; males with Latin teachers followed, while male children having Anglo teachers improved slightly.

Are Cognitive Changes in Head Start Children Related to Their Teachers' Backgrounds

From evidence adduced in the preceding section of this Report, it is apparent that such characteristics of Head Start teachers as, for example, their ethnic identifications, seemed to influence the amount of change which occurred in the pupils under their tutelage during the Summer of 1965. We could ask, quite logically then, whether or not children's changes (test-retest difference scores) could be effectively predicted from a prior knowledge of prospective Head Start teachers' background characteristics. This was among the major questions posed by us in our evaluation research program. This section presents the results of our study of the problem.

By the use of multiple linear regression (correlation) procedures, data from 103 children and their teachers were analyzed to answer the question asked in the heading above. The following model was used:

Criteria

(1) *Peabody Picture Vocabulary*: pretest-post-test difference scores
(2) *Preschool Inventory* difference scores (5 scales)

Predictors

(1) Ethnic group membership
(2) Marital status
(3) Home community size
(4) Father's occupation
(5) Church attendance (frequency)
(6) Amount of teaching experience
(7) College grade point average

The hypothesis which was tested predicted that children's criterion difference scores would be related to the predictor factors in teachers' backgrounds listed above. The results obtained appear in Table 48. These results upheld the hypothesis that the change scores achieved by the children enrolled in Project Head Start were reliably related to their teachers' backgrounds. The criteria predicted in testing the hypothesis at issue here were the same as those implicated by tests of earlier (Chapter III) hypotheses which related changes in children to teacher behavior and to certain attitudes of teachers. The scale measuring "Control and Following Directions" and the "Verbal-Social" scale of Caldwell's *Preschool Inventory* were both predicted significantly at the .01 level; the lowest F-ratio was obtained for the "Quantitative" scale of the *Preschool Inventory*.

TABLE 48

Criterion Changes (Pre- vs. Post-tests) in Children as Related to "Teacher Background" Predictor Variables

Criteria	R	Per Cent Variance	P
Peabody difference scores	.39	16	.14
Preschool Inventory: Scale I (Quantitative).	.29	09	.67
Preschool Inventory: Scale II (Unnamed).	.35	13	.31
Preschool Inventory: Scale III (Control and Following Instructions.	.51	26	.00**
Preschool Inventory: Scale IV (Verbal-Social).	.54	29	.001**
Preschool Inventory: Scale V (Developmentally Sensitive Items).	.39	15	.15

df = 11 and 91

** Significant at .01 level

All other F-ratios were sufficiently high to suggest some intuitive support for the hypothesis, although they were not significant at the .05 level. From these results, and others already presented in Chapter III, the suggestion may be made that the measured behavior and background characteristics of teachers are similar in their relationship to the change scores for Head Start children when the criteria and predictors of the present study are employed. The relationship appears to be stronger, however, where the criteria measured seem to demand relatively more verbal activity and social interaction between the teacher and the pupil in order for changes to be effected.

The reliability of prediction of the criteria used in the present model might have been increased if the number of predictors had been smaller. Marital status included a remarried classification category which received no positive responses, so, in the present model, this predictor was unnecessary; it reduced the possible predictive significance. The predictor variable, church attendance, was of little value, perhaps because of the social desirability of a positive response. This predictor could have been eliminated; denominational affiliation might possibly have been a more effective predictor. If any event, the effects upon the significance of prediction caused by such changes in the predictor set might be of substantial interest and value. Despite these caveats, however, the hypothesis tested was somewhat supported by the results, such support suggesting that differences in children's intellectual functioning scores are related to teacher background characteristics with the criteria and predictors considered here.

CHAPTER VI

PREDICTING ATTITUDES OF SUMMER 1965 HEAD START TEACHERS TOWARD PROJECT HEAD START AND ITS CHILDREN

In his doctoral dissertation,which was completed as a part of the present research program, Boger (1966) conducted an elaborate multiple linear regression investigation of differences among 1,000 of the Head Start teachers in the Texas Summer Program of 1965 in their attitudes and beliefs about the program and about children. Boger's basic contention was that teachers from different ethnic subgroups, possessing similar childhood socio-economic backgrounds, rural or urban residence, and amount of teaching experience, would manifest predictable variance in different attitudes toward, and expectations for, behavior similar to that which might be encountered among more or less "typical" Head Start children. The data employed consisted of teachers' responses to selected attitude inventories which were administered to them while they were members of a training workshop held before the beginning of Head Start teaching in the summer of 1965.

General Rationale

Using a Lewinian field-theoretical formulation (Ryans, 1960), teacher behavior (B_T) was seen by Boger to be a function of two operative factors: (P_T) the teacher and (E_X) the environmental press at a given moment, X, in time, *i.e.*,[$B_T = (P_T, E_X)$]. The situational and organismic conditions that define (P_T) at any instant in time were seen, further, to be functions of the motivational set of the teacher at time X. The motivational set, in turn, was viewed as depending on the developed attitude structure of the Head Start teacher. This general model proposed that teachers' attitudes (A_T) are at least semi-consistent predispositions toward engaging in certain behavior as responses to child behavior constituting environmental cues. In other words, attitudes were seen as "residues" of previous experiences in the teacher's life, psychological structures in terms of which any subsequent situation would be approached. Together with other contemporaneously operating influences (E_X), developed attitudes should then influence consequent teacher behavior.

Major Hypotheses

The recent literature concerning teacher attitudes was reviewed and, taken in light of the general theoretical context of the study, led Boger (1966) to assert two major hypotheses, as follows:

> 1. Mexican-American and Negro teachers began Project Head Start with more accepting and optimistic attitudes toward the program, and toward the children it would serve, than did the Anglo-American teachers.
>
> 2. Teachers of Mexican-American and Negro descent and culture began Project Head Start with more authoritarian attitudes regarding the management of child behavior than did their Anglo-American counterparts.

Measuring Devices

The measures of the dependent variables in Boger's study were items from the Project Head Start Evaluation and Survey Form and scores from three other attitude inventories: (1) the Minnesota Teacher Attitude Inventory; (2) the Behavior Classification Checklist (PSRC Form 11b1); and (3) the Child Attitudes Survey (PSRC Form 15a) (See Appendix ·). The measure of the major independent variable was, of course, the teacher's reported ethnic background. Other independent, or predictor, variables measured were: (1) teaching experience with deprived children, (2) teacher's childhood socio-economic background, and (3) the relative rurality-urbanity of the teacher's childhood environment.

Methods of Analysis

The data for 1000 Head Start teachers were analyzed by constructing and then testing relevant multiple linear regression models. The CDC 1604 computer was used in making these analyses. The value of the F-ratio was employed as a decision rule by which to judge if (1) differences in expected "full model" criterion prediction values (R) for the three ethnic sub-cultural groups could be concluded to be nonrandom and (2) ascertaining the probability level at which this conclusion could be drawn. The direction of significant differences was evaluated from graphic representations of the full model expected values for each dependent variable. The pertinent graphs appear in

Boger's (1966) dissertation. Overall differences, across the twelve mutually exclusive control variable categories employed, were examined for evidence providing support (or non-support) for the hypotheses initially asserted.

Attitudes of Optimism for and Acceptance of Head Start Program and Children

The general theoretical model basic to the research program reported herein proposed that life experiences (from birth to the time of the behavior studied) partially determine a teacher's attitudes toward pupils' environments and toward child behavior, a proposition which earlier research by Rich (1960), Robinow (1960), Havighurst (1960), and Goldberg (1964) had supported. Boger hypothesized, therefore, that teachers who, themselves, have experienced the subcultural "realities" of deprived children directly would, generally, accept, identify with, and relate to these children more effectively than would others who had not had such experience. It was predicted, also, that Anglo-American teachers,in general, would manifest environmentally developed patterns of relatively unaccepting and pessimistic attitudes regarding environmentally deprived children and their potential for change.

Results and Interpretation

In the main, these contentions just described were supported by Boger's (1966) analyses. Table 49 describes the seven questionnaire items used to measure teachers' attitudes along an "acceptance vs. non-acceptance" dimension. Five of these criterion items, analyzed in relation to ethnic group membership and other predictors, produced F-ratios which were statistically significant ($P < .05$); three of them were even more significant ($P < .001$). These results are presented in Table 50. The direction of these non-chance differences was consistently in the direction hypothesized. Thus, Anglo teachers were significantly less "accepting" in their responses than Latin-American teachers, who manifested more acceptance, and Negro teachers, who showed most acceptance of Head Start types of children. Boger's (1966) findings supported Becker's (1952) contention, and Davis's (1952), therefore, that so-called "Anglo" teachers should be found to score lower (less empathic) on these kinds of items than should teachers from the other two ethnic sub-cultures.

A second aspect of the general question asked earlier concerned teachers' "optimism" that positive results with children would be achieved by the Summer Head Start project in 1965. Four criterion items measured this attitude; they, as administered in the Survey, are presented in Table 51. Only one of these criteria yielded an F-ratio indicating that "optimism" could be significantly predicted. This criterion item asked, "How successful do you think this Summer's Head Start program will be, in general, in up-grading the educational

TABLE 49

Criterion Items Used in the Project Head Start Evaluation and Survey Form (PHSEAS) to Measure Acceptance vs. Unacceptance of the Socially Disadvantaged

Criterion Item	Item Description
1_{1A}	"How well do you feel that you really identify yourself with so-called 'culturally deprived' children?"
1_{1B}	"If you were given the opportunity would you go into full time work with the culturally deprived?"
1_{1C}	"To what extent do the people in the community in which you teach show concern about poverty and its effects?"
1_{1D}	"To what extent are the teachers in your school really concerned about poverty and its effects?"
1_{1E}	"To what extent do you feel you have been successful in working with pupils from various ethnic groups?"
1_{1F}	"To what extent do you feel you would be successful in working with pupils from various ethnic groups?"
1_{1G}	"In activities outside of school (neighborhood activities, club work, church work, children's activities and groups) I have had experience working with other ethnic groups to this extent."

TABLE 50

Prediction of Teachers' "Acceptance *vs.* Non-Acceptance" Scores from Ethnicity and Other Variables

Criterion	R^2 Full Model	R^2 Restricted Model	Numerator Df	Denominator Df	F	p
1_{1A}	.0900	.0516	24	964	1.6916	.020*
1_{1B}	.1588	.0735	24	964	4.0752	.000***
1_{1C}	.0461	.0157	24	964	1.2819	.162
1_{1D}	.0585	.0116	24	964	2.006	.003**
1_{1E}	.0783	.0214	24	964	2.4786	.000***
1_{1F}	.0365	.0118	24	964	1.0323	.421
1_{1G}	.0814	.0176	24	964	2.7864	.000***

*$p < .05$
**$p < .01$
***$p < .001$

TABLE 51

Criterion Items Measuring "Optimism" For Program Effectiveness

Item No.	Item Content
1_{2A}	"At the present time which of the following might best describe part of what you feel about Project Head Start?"
1_{2B}	"How successful do you think this summer's Head Start program will be, in general, upgrading the educational and personal development of the children it reaches?"
1_{2C}	"In general, what proportion of the pupils across Texas in this summer's Head Start Program will be significantly helped by the program?"
1_{2D}	"At the present time which of the following comes closest to describing your honest feelings as to the usefulness of this summer's Project Head Start?"

TABLE 52

Head Start Teachers' "Optimism" For Positive Results of Compensatory Education

Criterion	R^2 Full Model	R^2 Restricted Model	Numerator Df	Denominator Df	F	p
1_{2A}	.0492	.0200	24	964	1.2336	.199
1_{2B}	.0699	.0093	24	964	2.6174	.000***
1_{2C}	.0402	.0150	24	964	1.0546	.391
1_{2D}	.0502	.0153	24	964	1.480	.064

*$p < .05$
**$p < .01$
***$p < .001$

and personal development of the children it reaches?" Responses to this question showed expected full-model values that were significantly ($P < .001$) different across ethnic sub-groups, and a graphic examination of them showed that the direction of differences was that which had been hypothesized earlier. Anglo-American teachers appeared more "pessimistic" than Latin-American teachers, who, in turn, were evidently less optimistic than the Negro teachers.

A final form of Boger's (1966) first general question arose from considering earlier studies by Gottlieb (1964), Cooper (1963), Davidson and Lang (1960) and Friedman, Pierce-Jones and Barron (1965). These investigators had found that teachers from ethnic sub-cultural backgrounds similar to those of the children they were teaching appeared more confident of their own probable effectiveness in such teaching. Three questionnaire items were used as criterion measures of this sort of "self-confidence" in this analysis. The items are described in Table 53. Two of these yielded significant prediction ($P < .05$). The items as shown in Table 54, and a graphic analysis of expected criterion values indicated that ethnic group differences occurred in the direction hypothesized. Thus, Anglo-American teachers reported less "confidence" in their prospective teaching role, and the Negro teachers again were the most optimistic.

TABLE 53

Head Start Teachers' Confidence in Their Effectiveness as Teachers of Disadvantaged Children

Item Number	Item Content
1_{3A}	"How successful do you think you will be this summer in working with the pupils in your Head Start class?"
1_{3B}	"Assume that you will have 15 pupils in your Head Start class this summer; what proportion do you think will be significantly helped by the program?"
1_{3C}	"When I think if the problems which we face and then of Project Head Start, I come closest to fitting the following description."

TABLE 54

Predicting Optimism For Personal Teaching Effectiveness of Head Start Programs

Criterion	R^2 Full Model	R^2 Restricted Model	Numerator Df	Denominator Df	F	P
1_{3A}	.0702	.0201	24	964	2.1653	.001***
1_{3B}	.0563	.0292	24	964	1.1520	.276
1_{3C}	.0519	.0147	24	964	1.5750	.039*

*p < .05
**p < .01
***p < .001

In summary, these results supported Boger's (1966) first major hypothesis very strongly. Negro and Mexican-American Head Start teachers' responses indicated that they did go into the project with more acceptance of the children and with more optimism for positive results from compensatory educational action than did their anglo-American counterparts.

Regarding the effect of teaching experience on teachers' attitudes, Boger (1966) noted that a marked decrease in variance occurred between the expected criterion values for the three ethnic groups of teachers. This decrease was found for all teachers who had extensive (6+ years) teaching experience.

Variance in teaching experience has been found by others (e.g., Ryans, 1960) to exert significant influences on teachers' attitudes, and this is consonant with the hypotheses undergirding Boger's research. When the teacher had little or no teaching experience, general childhood through adult environments apparently had their maximum effect. With extensive teaching experience, the influence of actual teaching experience was apparently a predominant one. This is surely a finding of major importance.

Predicting Head Start Teachers' Relative Authoritarianism Toward Children

In cross-cultural research, the Andersons (1959, 1961, and 1962) showed that teachers with their roots in the Mexican culture were much more likely to view school children in authoritarian, dominating, "distrustful", restrictive ways than were Anglo-American teachers. Terhune's (1963) replication of some of this work reinforced these findings. Drager and Miller (1960), among others, have emphasized the seemingly authoritarian nature of the matriarchal Negro sub-culture, with its frequent absence of the father from the home being viewed as increasing the independent, dominant nature of Negro female children. The Negro teacher, therefore, might be thought likely to show more authoritarian attitudes toward children than would Anglo-American teachers. On the basis of these and other studies, Boger's second major Hypothesis was formulated. The main criterion instrument employed in analyses related to this second hypothesis was the Minnesota Teacher Attitude Inventory (MTAI), which Horn and Morrison (1965) recently showed yielded three factors basically reflective of "democratic vs. authoritarian" attitudes. This finding has tended to support the claims of Leeds, Cook and Callis (1951) that the MTAI measures democratic values which are related to teachers' abilities.

The results of the regression analysis of MTAI scores are shown in Table 55. These findings indicate non-random MTAI differences

TABLE 55

Multiple Regression Prediction of MTAI Scores of 1000 Head Start, Teachers

2 Criterion	R^2 Full Model	R^2 Restricted Model	N Df	D Df	F	P
MTAI Scores	.0999	.0141	24	964	3.8290	.000***

***$p < .001$

occurred between ethnic groups of Head Start teachers ($p < .001$). Moreover, a graphic analysis of predicted MTAI score values indicated that Anglo-American teachers obtained higher (more democratic) scores than did other Head Start teachers. Latin-American teachers did not score lower than Negro teachers, and, as a matter of fact, no clear direction was found in the differences between the latter two groups. However, the analysis of predicted MTAI scores showed that, in relation to amount of relevant teaching experience, clear directional differences did occur. Negro teachers scored lowest, Anglo-American teachers highest, and Latin-American teachers in between. With six or more years of experience, the Anglo teachers still scored higher, but the differences were less marked. A possible explanation for this might be essentially similar to that entertained earlier in connection with Boger's first hypothesis.

In summary, these results involving the "authoritarianism" of teachers' attitudes indicated that the Negro teachers, in general, appeared more restrictive and traditional in their beliefs about children than were the Anglo teachers. The Mexican-American teachers also appeared to be more "traditionally oriented" than did the Anglo-Americans. In general, however, the Mexican teachers seemed to be more "democratically oriented" in this domain than did the Negro teachers. But, again, the amount of the individual's teaching experience was almost surely an important factor bearing on the results. Further research should probe carefully into the interactive effects of teaching experience with ethnic background.

CHAPTER VII

PROJECT HEAD START: TEACHER INTEREST AND COMMITMENT*

In the summer of 1965, several thousand score of preschool children and some 40,000 teachers took part in Project Head Start. This 8-week program was intended to enhance underprivileged children's school readiness. Among the important questions which could be asked about Project Head Start, several concerned teachers' opinions of the program. Did teachers consider that Head Start would be effective? Did they think it would produce real changes in the children? Did teachers look on Head Start as a "boondoggle," or as a significant new effort in children's education and socialization? However they may have seen things, teachers' opinions and expectations well may have been an important program component, if for no other reason than that the results obtained could have reflected Merton's (1949) "self-fulfilling prophecy.

In the context of a larger research program, responses to eight questions regarding their initial opinions of the program, their expectations for it, and their predictions of its probable effectiveness were obtained from 1250 Texas teachers who underwent one week of training for Head Start at The University of Texas. We have no reason to believe that these Texas teachers differed especially from those at other university training centers.

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*In press, Public Opinion Quarterly, as article co-authored by S. T. Friedman, John Pierce-Jones, W. E. Barron, and Bill S. Caldwell.

Purposes and Methods

In a general way, the problem studied and our methods of procedure have just been indicated. More specifically, however, our purposes, using autobiographical and opinionaire data from 1250 teachers, were to describe the teachers' initial (pre-Head Start) attitudes toward, and expectations for, Head Start and to relate these to variations among teachers in (1) experience working with children similar to those in Head Start, (2) volunteering for Head Start work, (3) socio-economic status, and (4) ethnicity. Frequency counts and proportions of teachers' responses to pertinent questions were made. Chi-square tests (Hogge, 1965) were performed to test relationships of reported opinions and expectations to the four inter-teacher variables listed above and described below: (1) 3 ethnic groups; (2) 6 levels of socioeconomic background; (3) inexperienced *vs.* long-experienced; and (4) "Self-starting" *vs.* "Stimulated" volunteering.

Subjects

The Ss were 1250 Texas elementary school teachers undergoing one week of intensive preparation for teaching in the Summer, 1965, Head Start programs in their communities. Of these 1250 Ss, 283 were Negro, 346 were Latin Americans, and 609 were so-called "Anglo," *i.e.*, Caucasoid Americans; for 12 Ss, ethnicity could not be determined. The socio-economic backgrounds, reported by these teachers on a 6-category scale in terms of their fathers' occupations, ranged from 47 Ss from Professional-Managerial (Level 6) homes to 330 Ss reporting home backgrounds typified by fathers holding jobs needing no special education or training (Level 1). The median reported socio-economic background was Level 3: work requiring some special training or an apprenticeship. As to experience in teaching children similar to those in Head Start, 200 of our 1250 Ss reported "no experience"; 306 reported 15 or more years of experience; while 744 reported from 1-15 years of experience. Self-report data indicated, with regard to degree of voluntary participation in Head Start, that 656 Ss volunteered "on their own," whereas 578 were otherwise "stimulated" (whether by administrative request or directive) to take part; the motivation for participation is unknown for 16 of our Ss.

Questionnaire

The survey questionnaire was a comprehensive, objectively answerable device, a copy of which appears in the Appendix. The instrument covered a wide range of autobiographical material and the 8 specific items related to Project Head Start shown in Table 56. Most of the instruments, except for the 8 Head Start-related items, had been thoroughly tested in other research (Pierce-Jones, 1965) with elementary school teachers.

Results

The means and standard deviations of the responses obtained from 1227 to 1241 of the total of 1250 teachers surveyed (with the 8 questions displayed) are shown in Table 56 together with the results obtained in Chi-square analyses which related obtained response distributions to ethnic group membership and length of teaching experience as described earlier. Other Chi-square results will be commented on below.

The results obtained for our total sample (cf., Table 56) appear to constitute strong evidence that, as a whole, these teachers were highly enthusiastic about Head Start, were eager to go to work, and felt confident that they could work effectively with, and produce real improvement in, the children toward whom the program was directed.

Effects of Experience

The two experience groups compared by the Chi-square test--200 "inexperienced" and 306 "experienced" (15 years or more) teachers --differed significantly ($P < .05$) in their responses to items 18, 22, 23, and 24, but not to the other 4 questions, although the direction of observed differences was the same in all comparisons. As might well be expected, experienced teachers showed greater confidence in their abilities and expected a higher degree of success for Head Start than did inexperienced teachers. Apparently acting from a background of fact, the experienced teachers expressed greater enthusiasm and confidence of success than did their more youthful, less experienced comperes.

Motivation to Participate in Head Start

As outlined above, we collected data to indicate how these teachers came to take part in Project Head Start--whether they volunteered "on their own" (i.e., were "Self-Starting Volunteers", N=656) or were otherwise induced to participate ("Stimulated Volunteers", N=578). Chi-square comparisons of these two groups on the 8 opinionaire items showed them to differ significantly on item 18 only. From this difference, as expected, it appeared that the "Self-Starting Volunteers" were indeed more eager than others to enter the program on a full-time basis ($X^2 = 16.36$, $P = .012$). Of even greater interest from our results, however, is the fact that, regardless of the mode of volunteering, all of the teachers felt that Head Start would be effective and useful, i.e., most comparisons produced statistically undependable values of Chi-square.

Socio-Economic Background

Our 8 opinion-attitude questions (cf., Table 56) did not elicit significantly different response distributions from the six socio-economic status groups compared. The prevailing posture of these teachers appeared, therefore, to be independent of the teachers' socio-economic origins.

Ethnic Group Membership

Table 56 shows that ethnic group membership was a major influence upon the response distributions obtained with the questions used; highly significant differences were obtained. Negro teachers clearly believed more strongly than others in the potential success of Head Start, in their own abilities to work effectively in it, and in their willingness to commit themselves, full-time, to work with culturally disadvantaged children. The Latin American teachers associated themselves with the Negro teachers' response distribution on 5 of 8 questions (18, 21, 23, 30, and 31), but tended toward an intermediate position on the remaining three items.

Conclusions

Some 1,250 teachers entered a one-week orientation-training program at The University of Texas prior to teaching in the 1965 summer Head Start program. They approached the task with strong feelings of enthusiasm, with confidence in the program and in their ability to work effectively in it.

Negro teachers, and teachers experienced in working with children similar to themselves, evinced greater confidence in their ability

TABLE 56

Questionnaire Items* Regarding Project Head Start

and Statistically Significant Chi-Square Group Distribution Comparisons.

Item No.	Question Content and Sample Response Options	Total Sample Response			Years Experience			Ethnicity		
		N	M	σ	X^2	df	p	X^2	df	p
15.	Which of the following might best describe part of what you feel about Project Head Start? 1. We are starting much too quickly with too little knowledge 4. Now is a good time to start; we can learn as we go 7. What we need is action, not talk; more speed, not less	1233	4.30	1.18	N.S.			64.98	12	.000
18.	If given the opportunity, would you go into full-time work (solely) with the culturally deprived? 1. No, not at this time 4. Am really undecided 7. Definitely yes	1232	5.41	1.91	60.08	6	.000	129.37	12	.000
21.	How successful do you think this summer's Head Start Program will be (generally) in upgrading the ... development of the children...? 1. Highly successful 4. About as successful as unsuccessful 7. Highly unsuccessful	1241	2.03	1.00	N.S.			68.68	12	.000
22.	How successful do you think you will be ... in working with the pupils in your Head Start class? 1. Highly successful 4. About as successful as unsuccessful 7. Highly unsuccessful	1239	2.12	0.87	14.197	4	.007	63.12	10	.000

TABLE 56 Continued

Item No.	Question Content and Sample Response Options	Total Sample Response			Years Experience			Ethnicity		
		N	M	σ	X^2	df	p	X^2	df	p
23.	Assuming 15 pupils in your Head Start class, what proportion do you think will be significantly helped ...? 1. 14 out of 15 3. 9 out of 15 6. 1 out of 15	1227	2.06	1.02	31.77	6	.000	25.07	12	.016
24.	In general, what proportion of the pupils across Texas will be significantly helped by this summer's Head Start program? 1. All of them 5. Approximately half 9. Practically none	1231	2.67	1.33	16.83	6	.011	32.94	12	.004
30.	...Which of the following comes closest to describing your honest feelings (about) this summer's Project Head Start? 1. It will have no real usefulness 4. I am uncertain as to its usefulness 6. It will have tremendous usefulness	1237	5.39	1.02	N.S.			41.60	10	.000
31.	When I think of the problems we face, and then of Head Start, I come closest to fitting the following description 1. Extremely enthusiastic; ready to start now 5. About half-way enthusiastic; maybe I'm too much a realist 9. I just can't get enthusiastic about it at all.	1235	2.03	1.42	N.S.			79.66	12	.000

*Total questionnaire available from Personnel Services Research Center, University of Texas, Austin 78712. Some tabled items slightly edited for brevity.

to be effective and in the program as a whole. Such factors as the socio-economic origins of the teachers and their mode of entry into (volunteering) the project did not suggest basic influences of these on the attitudes of the various sub-groups compared.

CHAPTER VIII

TEACHERS' OPINIONS OF THE EFFECTIVENESS OF PROJECT HEAD START, SUMMER 1965

The children who took part in Project Head Start during the summer of 1965 have now been enrolled in the first grade of American public schools since September, 1965. During the months of September-December of that year, first-grade teachers throughout Texas had numerous opportunities to observe the behavior of both Head Start children and of non-Head Start children from highly similar environments. From such observations, these teachers were considered to have formed relatively well-informed opinions concerning the perceptual-symbolic abilities and skills, motivation, social behavior, and emotional controls of these two kinds of children. The validity of teachers' opinions on such matters may be open to serious question on many grounds, but it can be argued quite plausibly, not only in the general case but from evidence presented in this Report, that teachers' opinions and beliefs well may influence their treatment of disadvantaged children in the classroom and, hence, the educational prospects and development of such children. This Chapter reports on an extensive "opinion survey" related to these concerns.

How, comparatively, did first-grade teachers who, for four months, had taught both Head Start and non-Head Start children in the same classrooms judge the abilities and other characteristics of these two groups of children? This was the basic question which our survey of first-grade teachers' opinions was designed to illumine. Among the many possible subsidiary questions which could have been approached were others concerned with teachers' observation-based expectations concerning the future educational progress of the children. We examined certain of these questions in the course of the present study.

Method

Teachers' Survey Form (TSF)

Senior staff members of the Personnel Services Research Center at The University of Texas designed the TSF as a means of collecting descriptive data concerning first-grade teachers and for surveying their opinions of (1) Head Start-experienced *relative to* (2) non-Head Start children from apparently similar environments. A copy of the TSF is included in the *Appendix* for the reader to examine at his convenience. The TSF contains 42 items of the multiple-choice type.

Subjects and Sampling

Subjects surveyed were 473 Texas first-grade teachers who, since September 1965, had taught both Head Start and non-Head Start children in their classes. Data were collected between January 5 and January 14, 1966 by skilled field interviewers who visited teachers in some 20 Texas communities. The communities visited were selected to represent a wide geo-cultural range. Both highly urban and relatively rural sections were surveyed. Negro, Latin-American, and Anglo-American teachers responded to the TSF. Some of these teachers had taken an active part as teachers in the Summer 1965 Head Start Program, while others had not.

Data

This report presents an analysis of the TSF data for 473 first-grade teachers. Thirty school systems were involved in the sample of 473 teachers. Twelve large urban school districts, seven small urban school districts, five small town school districts and six rural school districts cooperated with the Research Center in obtaining the information for this report.

Results

Of the 473 first-grade teachers whose data were examined, 52 percent took a part as teachers in the Summer 1965 Head Start Program. In a subsequent section we shall examine the extent to which these 238 teachers were more (or less) sanguine than others in their judgments of the relative effectiveness of Head Start. Initially, however, our interest centered on evaluations given by first-grade teachers about the effectiveness of the Head Start program without regard to the teachers' participation in Head Start.

The Summer 1965 Head Start Program

Of the 473 teachers whose responses are summarized in this report, 97 percent indicated that they considered the Head Start Program to have been comprehensive and thorough, covering many, or most, things that should have been covered, but having some remediable gaps. Table 57 shows in which curricular areas these first-grade teachers believed the Head Start Program could have been more effective or complete.

Nominations of Children by Teachers

Section 8 of the TSF asked the Texas first-grade teachers who were surveyed to name children in their classrooms who stood out in each of three separate characteristics: (1) learning proficiency, (2) probable ultimate educational failure, and (3) intellectual curiosity. The specific questions asked were these:

> 1. If you were having educational visitors to your classroom, and had been asked to select three students to demonstrate what the class has really been learning this year, which three of your students would you select? (Write their names on the lines below.)
>
> 2. If you selected the three students in your class whom you think might not finish High School, which three students would you select? (Write their names on the lines below.)
>
> 3. If you were making nominations for the "best examples of intellectual curiosity" in your class, which three students would you select? (Write their names on the lines below.)

TABLE 57

Curricular Areas in Which Head Start Should Have Been More Effective According to 473 Texas First-Grade Teachers

TSF Question and Response Alternatives	Teachers Naming each Alternative	
	N	Per cent
If you feel more emphasis was needed in certain areas, please indicate which ones (Do not circle more than 3 items).		
1. Reading readiness	298	68
2. Number concepts	219	46
3. Use of colors	40	8
4. Familiarization with classroom objects	41	8
5. Familiarization with typical objects in average home	61	12
6. How to share with others	55	11
7. How to follow instructions	293	62
8. How to get along better with peers	51	9
9. How to get along better with adults	17	3

Four hundred seventy-three teachers supplied 1419 pupils' names in response to these questions. Subsequently, each child mentioned by a teacher was identified as having, or as not having, taken part in the 1965 Summer Head Start Program.

The hypothesis was tested that, unless factors other than chance were operating to influence the teachers' nominations, Head Start and non-Head Start pupils should have been equally often named in response to each item. Values of Chi-square were calculated to determine if the actual frequencies of mention departed significantly from a purely chance expectation. For Item 14, $X^2 = 12.3$; for Item 15, $X^2 = 39.4$; and for Item 16, $X^2 = 13.4$. The probability that the obtained distributions of mentions departed from a chance distribution was greater than .999 in each instance. In response to Item 14, 776 Head Start and 643 non-Head Start children were cited; for Item 15, 828 Head Start and 591 non-Head Start pupils were named; in answering Item 16, 640 Head Start and 779 non-Head Start children were mentioned. Clearly, then, Head Start children were noted for learning proficiency and intellectual curiosity significantly more often, and for potential educational failure significantly less often, by these Texas first-grade teachers who had taught both categories of pupils.

General Comparisons of Head Start with non Head Start Children

Twenty-four TSF items (Section C) asked the 473 first-grade teachers surveyed to make comparative judgments of Head Start and non-Head Start children from similar environments on a variety of observable characteristics. The following TSF item (Item C-8) is representative of the form of each such item used.

C-8. In relationships with teachers, Head Start children get along:

1. Much better than similar non-Head Start children.
2. Somewhat better than similar non-Head Start children.
3. About the same as similar non-Head Start children.
4. Somewhat less well than similar non-Head Start children.
5. Much less well than similar non-Head Start children.

All responses by the teachers were recorded on 5-point multiple-choice scales. For convenience, however, the results have been summarized in Table 58 in only two-categories--*i.e.*, the percentage of responses to each item indicating superior performance by Head Start children and the percentage of responses indicating equal or inferior status for Head Start as compared with non-Head Start children.

TABLE 58

Comparisons of Head Start-Experienced and non-Head Start Experienced Children on Twenty-Four Educational, Social, and Personal Behavior Characteristics by 473 Texas First Grade Teachers

Item	Characteristic Judged By Teachers	Per Cent of Teachers Saying	
		Head Start Child is Superior	Head Start Child is Equal or Inferior
A.	Relations with classmates	70	30
B.	Relations with teachers	67	33
C.	Readiness for school	85	15
D.	Liking for school	62	38
E.	Extroversion (lack of shyness)	74	26
F.	Ability to share	61	39
G.	Completing learning tasks	58	42
H.	Less anxious in school	76	24
I.	Frustration tolerance	6	94
J.	Control of feelings	50	50
K.	More aggressive (less docile)	64	36
L.	Ease of teacher control	48	52
M.	Following instructions	71	29
N.	Self-respect; Self-esteem	58	32
O.	Learning to read	64	36

TABLE 58 (CONTINUED)

Item	Characteristic Judged By Teachers	Per Cent of Teachers Saying Head Start Child is Superior	Per Cent of Teachers Saying Head Start Child is Equal or Inferior
P.	Reading comprehension	64	36
Q.	Number comprehension	68	32
R.	Color recognition ability	77	23
S.	Using appropriate colors	71	29
T.	Logical reasoning	59	41
U.	Knowing common objects	75	25
V.	Proper use of common objects	73	27
W.	Form (shape) perception	73	27
X.	Using abstract concepts	71	29

Teachers With and Without Head Start Experience

The comparisons just noted were chiefly concerned with first-grade teachers' opinions without regard to whether or not such teachers' had been engaged in the Summer Head Start Program. It seemed logical, however, to suppose that those first-grade teachers who had been so engaged might present relatively more favorable opinions of Project Head Start and of Head Start children than might teachers who had not participated in the program. We analyzed the responses to the TSF separately for these two groups of teachers.

Nominations of Children. Fundamentally, we wished to know if a first-grade teacher's having participated, during the summer of 1965, in a Head Start program influenced her tendencies to name Head Start children for learning proficiency, potential educational failure, or intellectual curiosity. Two x two Chi-square comparisons for TSF items 14, 15, and 16 showed that:

1. Head Start-experienced first-grade teachers nominated Head Start children in their own classrooms significantly ($P < .001$) more often for proficient learning than did non-Head Start teachers; chi-square = 38.3.

2. Head Start-experienced and non-Head Start experienced first-grade teachers did not differ ($P > .80$) significantly in their tendency to name Head Start children, relative to non-Head Start children, as potential educational failures; chi-square = .02.

> 3. With respect to "intellectual curiosity," Head Start-experienced first-grade teachers, compared with non-Head Start-experienced teachers, named Head Start children significantly ($P < .001$) more often than did non-Head Start-experienced teachers. chi-square = 35.6

General Comparisons. When Head Start-experienced teachers' detailed perceptions of Head Start-children and of non-Head Start-experienced teachers in the fashion shown earlier (Table 58), the results summarized in Table 59 emerged. For these 24 TSF (Section C) items, both Head Start-experienced and non-Head Start-experienced first grade teachers perceived children from the summer 1965 Head Start Program as being superior in development to their non-Head Start classmates from similar environments.

It should be clear from Table 59 that teachers who had worked in the Head Start Program held somewhat more favorable opinions of Head Start children (relative to their comperes) than did those first-grade teachers' judgments of the children's "relations with teachers," "liking for school," "ability to share with others," "docility," "self-esteem," "learning to read," "using colors," "logical reasoning," and "using abstract concepts." Generally, both Head Start-experienced and other first-grade teachers believed Head Start children to be superior in these characteristics. This was not true, however, for judged "ability to share," "ease of teacher control," or "liking for school." In these three characteristics,

TABLE 59

Head Start-Experienced (N = 200) First-Grade Teachers' Opinions of Head Start and Non-Head Start First Graders as Compared with the Judgements of 273 Non-Head Start Experienced First Grade Teachers

Item	Characteristic	Percentages			
		Head Start Teachers Saying		non-Head Start Teachers Saying	
		Children Superior	Children Inferior	Children Superior	Children Inferior
A.	Relations with classmates	86	25	59	41
B.	Relations with teachers	84	16	55	45
C.	Readiness for school	95	5	77	23
D.	Liking for school	78	22	51	49
E.	Extroversion (lack of shyness)	85	15	66	34
F.	Ability to share	80	20	48	52
G.	Completing learning tasks	71	29	49	51
H.	Less anxious in school	87	13	70	30
I.	Frustration tolerance	2	98	7	93
J.	Control of feelings	62	38	42	58
K.	More aggressive (less docile)	65	35	65	35
L.	East of teacher control	60	40	39	61

TABLE 59 (CONTINUED)

Item	Characteristic	Percentages			
		Head Start Teachers Saying		non-Head Start Teachers Saying	
		Children Superior	Children Inferior	Children Superior	Children Inferior
M.	Following instructions	85	15	61	39
N.	Self-respect; Self-esteem	79	21	59	31
O.	Learning to read	82	18	52	48
P.	Reading comprehension	79	21	55	45
Q.	Number comprehension	79	21	60	40
R.	Color recognition ability	90	10	68	32
S.	Using appropriate colors	86	14	61	39
T.	Logical reasoning	76	24	46	54
U.	Knowing common objects	85	15	69	33
V.	Proper use of common objects	84	16	65	35
W.	Form (shape) perception	93	7	59	41
X.	Using abstract concepts	89	11	58	42

non-Head Start-experienced teachers did not judge Head Start trained children to be either superior or inferior to non-Head Start first-graders.

Summary

This paper presented an analysis and report of first-grade teachers' opinions of Project Head Start (Summer 1965) and of their judgments of the characteristics of Head Start children in their first-grade classes compared with those of non-Head Start children from similar environments. Areas in which the Head Start Program was seen to need substantial strengthening were most often said to be (a) reading readiness, (b) number concepts, and (c) following instructions. It might be supposed that first-grade teachers will always want more preschool stress on these matters. Overall, however, these first-grade teachers considered the Summer 1965 Head Start Program to have been thorough, comprehensive, and highly effective.

In comparing first-grade children who had been exposed to Head Start with other first-grade children (from similar environments) who had not taken part in Head Start, first-grade teachers mentioned the Head Start children substantially more often as being "proficient learners" and as being "intellectually curious." In addition, these first-grade teachers--regardless of whether or not they had participated in Head Start themselves--tended, almost overwhelmingly, to see

Head Start children as superior to non-Head Start children in almost all attributes that the Head Start Program was intended to improve.

CHAPTER IX

SUMMARY, INTERPRETATIONS, AND DIRECTIONS FOR NEW RESEARCH

We have now come full circle. Beginning with an abstract and highly general notion of how programs of compensatory pre-school education, such as Head Start, may operate to produce important changes in young children, a schematic interactive model was developed (Figure 1, page 6). This model generated a host of empirical evaluation researches, concerned with the Summer, 1965, Head Start program. It could generate many more specific predictions than the ones we have been able to test since July, 1965.

Essentially, our model involved specifying relationships between multiple interacting factors of teachers and children which we considered would influence variations in Head Start teachers' classroom teaching behavior patterns, or "styles." Variations in these styles (teaching behavior patterns) were considered to be the most probable immediate progenitors of various kinds of behavioral changes which were expected to occur, variably, in the pupils enrolled in compensatory classes. Our model recognized that changes should have taken place in "cognitive-symbolic" and "perceptual-motor" behavior, motivational characteristics, emotional controls, and the children's social interactions. Our multistage, interactive factors conception also provided that changes in one of these classes of children's attributes should, most likely, have been associated with changes in the other classes. Furthermore, such complex, presumably Head Start-produced, changes in pupils should, we believe, have persisting effects in the child's later life on both (1) educational development in the early school grades and (2) upon his later extraschool experience.

The present studies were initiated virtually at the outset of the Summer, 1965, Head Start programs. The first step was to obtain data pertaining to 1256 Head Start teachers--their previous experience, training, socio-economic origins, etc., and their presently existing developed attitudes toward culturally disadvantaged children, toward Head Start itself, and toward the kinds of children Head Start (and these teachers) might be expected to serve. A second step required two things: (1) that early Head Start measures be obtained of a representative Texas-wide sample of Head Start children, and (2) that means should be devised whereby we could measure (by direct observation) the dimensions of the programs of Head Start classes in terms of the behavior of the teachers toward Head Start pupils.

The sample of teachers and pupils was, as noted above, Texas-wide in its scope. It was obtained by randomly selecting thirty-five Texas communities having Head Start programs from the total list of such communities constituting a Census Bureau sample. In order to assure the geo-cultural and urban-rural adequacy of our sample, five additional communities were chosen to bring our sample of Texas Head Start communities up to a total of forty. Seventy Head Start Centers in these forty communities contributed to our samples of Head Start teachers and pupils.

To measure teachers' classroom behavior as "program input" to children in their classes, we developed--from the literature and, later, by factor-analytic methods--a rating scales device called the Observer's Rating Form (ORF). This device has yielded seven reliably measurable teacher behavior factors--e.g., "Stimulating Cognitive Development," "Showing a Middle Class Orientation," etc. Twenty-three advanced graduate students were trained to employ the ORF in comparable ways, and made 493 separate classroom observations in the seventy Head Start Centers (forty communities) in our sample. Generally, more than one, and up to six, observations were made in each sample classroom.

The children in the classrooms, who were chosen to be examined and, later, retested by qualified psychometrists, were selected randomly within classes. These children were tested once relatively early in the eight-week Summer program and again relatively late in the program. The temporal interval between the pretest and post-test of each child was not held constant, but was recorded and, subsequently, taken into account as a source of variance in pertinent analytical comparisons. The tests administered to the children were (1) the *Peabody Picture Vocabulary Test*, (2) the *Sequin Form Board*, (3) Hubbard's group adaptation of Bender's *Visual-Motor Gestalt Test*, and (4) Caldwell's five-scale *Preschool Achievement Inventory*, designed specifically for Project Head Start. The five *Preschool Inventory* scales used were deemed, from factor-analytic and other evidence, to measure the following constructs reliably:

1. Quantitative Concepts
2. "Unnamed," or Personal-Social Responsiveness
3. Control and Following Directions
4. Verbal-Social Concepts
5. Developmental Increments

The measuring devices used with teachers included several attitudes scales developed by Pierce-Jones (1965) for the Interprofessional Research Commission on Pupil Personnel Services (IRCOPPS) to measure such orientations as:

1. "Irritability" of teachers vis a vis child behavior (Form 11b1)
2. "Needs for Assistance" in managing classes of child behavior problems (Form 19a)
3. Beliefs about causes of children's behavior patterns ("Child Attitudes Survey", Form 15a)
4. "Dimensions of Teacher's Opinions" (Form 12c, designed to measure 5 factors of teachers' "mental health promoting" tendencies.)
5. "Autobiographical Data Form" (Form 20a, designed to survey items of teachers' demography, child and adult experience, training, experience, etc.)
6. Project Head Start Experience and Attitude Survey (a device to tap Head Start teachers' relevant experience with the disadvantaged, hopes and fears for compensatory education, acceptance or lack of it relative to disadvantaged children, and "self-confidence" regarding the teacher's own prospective role in Head Start.)
7. The Minnesota Teacher Attitude Inventory, designed to predict the likelihood of a teacher's establishing good rapport with pupils.

The chief statistical methods used to analyze the data acquired included both analysis of variance techniques, used to ascertain the independent and interacting sources of variance in a characteristic, and multiple liniar regression (correlational) analyses made to measure the extent to which a given measured criterion variable could be efficiently forcasted from a selected, measurable set of hypothetical predictor variables.

Results and Conclusions
Summarized

Extensive statistical analyses of our data, acquired and examined in the ways just described, led to a wide array of results and general conclusions. The more important of these, in our judgment, were the following:

1. Head Start program variations can be conceptualized and can be meaningfully measured through direct observations by trained classroom observers using our Observer's Rating Form (ORF).

2. The ORF appears to measure several meaningful paramoters of Head Start teachers' "programmatic input" to children. These dimensions of inter-teacher behavioral variance included the following:

    A. Stimulating Children's Cognitive-Perceptual Development

    B. Providing Warmth and Supportiveness to Children

    C. Showing Respect to Children

D. Stimulating Motor Skills

E. (Teacher) Showing Dependency Needs

F. Encouraging Perceptual Growth and Motor Control

G. Communicating a Middle Class Orientation

3. The corrected reliability coefficients (split-halves) of the foregoing ORF factor-based scales ranged from .62 through .95, with a median value of .88. Hence, each of these ORF scales could be considered to measure a substantial amount of true variance in teachers' behavior.

4. The teachers' obtained ORF scores significantly predicted measured changes in Summer Head Start children, especially changes in Peabody Picture Vocabulary Test ("intelligence?") and Preschool Inventory "Personal-Social Responsiveness" scores.

5. When sets of teachers' pre-Head Start attitude scores were combined in a predictor set with their ORF scores, even better prediction of changes in Head Start children was achieved (cf., Table 17, page 65), since Peabody Vocabulary Test, Sequin Form Board, and three Preschool Inventory scale scores, including that (Scale V) which is composed of test items which are peculiarly sensitive to experientially-based developmental changes.

6. The combination of observed Head Start teacher behavior (ORF scores), teacher attitude scores, and the children's pretest scores on the change-criterion tests did not especially improve our predictions of changes in Head Start children over and above the level achieved with ORF and teacher attitude scores alone. Clearly, the teacher's behavioral component of the Head Start Program bears crucially upon the production of changes in children.

7. In no instance did we achieve significant prediction of children's change scores on the Quantitative scale of the Preschool Inventory. This fact perhaps introduces complex questions relative to the interlacing of maturational processes, and critical periods, the ammount and quality of Head Start quantitative teaching, and previous histories of quantitative acculturation in the general environments of disadvantaged children. Such questions cry out for untangling in the interests of more adequate programs of compensatory education for the culturally differentiated children in the United States and elsewhere.

8. Granting that the teachers' behavior (ORF-measured) relative to Head Start pupils did combine with teachers' attitudes to permit substantially good predictions of changes in the children, it became important to test the hypothesis that ORF-rated teacher behavior was, itself, predictable from other, previously known attributes of teachers. To some extent, we found that it might, perhaps, be so, although the evidence on the point (cf., Tables 19, 20, 21) was rather more ambiguous than we had hoped.

9. Examination made of the hypothesis that teachers whose childhoods had been lived amidst the same sorts of subcultural "realities" as had those of many of their Head Start pupils, would be (1) more optimistic for Head Start's effectiveness, (2) more accepting of the children, and (3) more confident than other teachers of their own likely proficiency as Head Start teachers were generally supported by our investigations. Ethnic group differences among the teachers appeared to be especially important influences on these attitudes. With regard to "acceptance" of the children, Anglo-American teachers were least accepting and Negro teachers were most accepting, while Latin American teachers fell "in between" the two other groups. The same order of the groups held with respect to optimism for Head Start's, likely effectiveness and for "confidence" in teaching the

disadvantaged--Anglos were the least "optimistic" and "confident," while the Negroes were the most sanguine group. These group differences were relatively much less striking for experienced (6+ years) as compared with less experienced teachers (less than 6 years).

10. Various statistical analyses reported in Chapter V showed, with virtual certainty, that Head Start in Texas in the Summer of 1965 did change the children in the desired direction on carefully administered intellectual functioning tests. The changes observed were on the average almost uniformly gains in a positive direction, but were complexly related both to the time interval which elapsed between an initial test of the children and a second (later) test and to the ethnic group (Anglo, Latin, Negro) identifications of children's Head Start teachers.

11. A comparison of the later tests of Texas Summer, 1965, Head Start children with the same tests given to first-grade children of similar background in the eighth week of these children's first-grade schooling showed that the Head Start children had scored significantly above their first-grade comperes. Although these non-Head Start children were older than Head Starters when tested, they had had about the same amount of formal schooling, yet the Head Start children consistently excelled them in intellectual performance.

12. Finally, when 473 Texas first-grade teachers who had both Head Start and non-Head Start pupils in their classes were queried by our field staff as to their observation of the effects of the Head Start program, they endorsed it enthusiastically, while suggesting program areas needing improvement. Offered the opportunity to nominate any of the children then in their first-grade classes for "learning proficiency," "intellectual curiosity," and "potential educational failure," these

> teachers named children later identified as Head Starters significantly more often than non-Head Starters for the first two attributes and significantly less often as "potential educational failures."

Conclusion

There is really only one salient overriding conclusion to be drawn from the evidence presented in this Report and summarized in a dozen paragraphs above. The Summer, 1965, Head Start program in Texas changed the children in its target population, as it was intended to do. The changes which the children showed were: (1) such as to increase school readiness; (2) variable from child to child; and (3) generally significantly predictable from readily obtainable data.

We would caution all and sundry that this evaluation of Project Head Start in Texas was in no sense a complete study of the effects of Head Start. Parent involvement and change did not come under scrutiny. Moreover, the persistence of the changes apparently wrought in the disadvantaged population of children is at issue. Many factors in a child's home, peer society, school, community, and ethnolingual subculture may work in complicated ways to prejudice, sustain, or promote Head Start initiated changes in childhood.

It would be, we believe, a grievous error to think explicity, or to assume implicity, that preschool training's effects have some quasimagical powers in themselves to break the bonds of the poor and the disadvantaged. We must set about studying the later careers of Head Start children to learn about and to learn to use the forces that promote cultural integration (as against alienation) and changes in the so-called "culture of poverty." More than a few significant hypotheses in these areas could, and should, be generated from the thinking and writing of such concerned scholars as Sanford (1966), Hickerson (1966) and many more.

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APPENDIX

DIRECTIONS FOR OBSERVERS

The appended Project Head Start Center Observer's Rating Form presents scales which will be used to obtain rating data relating to teacher behavior variables. Major emphasis should be placed on agreed-upon concepts for the scale-steps and upon defining the limits of each scale. Scales involving frequency, intensity, or amount should be carefully described so that each observer has examples and other guidelines to use for each step of a scale. Practice observations should be conducted in training sessions and carefully monitored.

It is proposed that trained observers can record teacher input with a degree of reliability that will produce data whose reliability is comparable to that obtained from paper and pencil tests and surveys. Studies indicate that competent, trained observers can achieve inter-observer correlations of between .75 and .95. Others have stressed the critical areas in training observers and in using such data. Observers used to collect data relative to teaching behavior variables should be trained to a criterion level which would assure acceptable inter-observer reliability.

Observer teams of two people record data through direct observation of Head Start classes and from personal interviews with the teachers. Each observer team should consist of two persons to insure higher reliability and to take advantage of the training and experience of persons from both education and psychology. Wherever possible, one team member would be a teacher who had had experience in working with culturally disadvantaged children. She should have a basic understanding of psychometric concepts and of human behavior, but she would be selected primarily for her ability to observe crucial variables carefully and to record data accurately. The second team member would be a person trained in educational psychology, psychology, sociology, or a related area, who had had experience in working with children. He would generally have had broad training and experience in individual and group psychometric evaluation, in teacher consultation, and in research.

Careful attention should be paid to the selection of these observers. Whether a person possessed the characteristics of a good observer would be of greater importance than the amount of formal education he might have. Each observer should take part in an intensive training program conducted at the institute involved. During this time there should be concentration upon (a) inter-observer reliability, (b) techniques of observing, (c) agreement on terms and concepts, and (d) recording of data. Training sessions should include discussions of the pupils and of the teachers involved. Emphasis should be placed on the fact that the observer teams are to collect data; they are not to carry out evaluations other than those necessary in the recording of data.

The observer teams, which are trained to evaluate teacher behavior variables through observation and the use of quantitative scales, will also carry out interviews with the teachers whom they observe. The interview will serve the double purpose of reducing the anxiety which a teacher may experience as a result of the observation and of enabling the observer team to secure additional information relative to teacher variables. The observer teams will so structure the interview, according to specific criteria, that comparable data will be secured from all teachers interviewed. In particular, questions will be used which are designed to elicit responses that will allow the observers to record additional data related to the following two questions: (1) What is the expressed attitude of the teacher toward the children? (2) In what ways does the teacher perceive and describe the program in her classroom as incorporating objectives, techniques, and concepts which are different from those usually encountered in other classes.

Specific Directions for Observers

Observations should take at least 45 minutes. The following directions are given for specific items:

Item 1: The observer should note the degree to which the teacher "insists on" versus "accepts" verbal communication. The observer is urged to mark the frequency of the teacher's response if necessary. Number 5 of Item 1 should be clarified to mean "Allows nonverbal communication more than she insists on verbal communication."

Item 2: The word "each" in Item 2 should be stressed. Unless each child is given the opportunity to organize and express himself, it is felt that the teacher is not consciously giving opportunities for expression. A question to ask for Item 2 is "Does the teacher ask or allow a child to explain what he is doing when the group is participating?"

Item 3: Same directions as Item 2.

Item 4: An example of this item is the teacher's providing a "show and tell" period.

Item 5: Every teacher has the opportunity to call attention to the classroom environment, home, and the surrounding environment. Does the teacher ask questions about the environment? Does the teacher show curiosity? Does she emphasize comparisons and discriminations?

Item 6: Does the teacher emphasize complete sentences to the children? Does she assist them in this? Does she emphasize use of pronouns?

Item 7: This item deals with the extent to which the teacher provides an adequate language model for the children.

Item 8: Self-explanatory.

Item 9: Does the teacher go out of her way to use a variety of verbs? Example: skipping, walking, running, etc.

Item 10: Same as Item 9.

Item 11: Does the teacher explain to the class the importance of following directions? Does she give several specific directions in a series? Does the teacher give the children time to follow the directions?

Item 12: Does the teacher let the children feel and touch objects? Does she present stimuli in a variety of ways?

Item 13: Self-explanatory.

Item 14: Self-explanatory.

Item 15: Self-explanatory.

Item 16: Self-explanatory.

Item 17: Self-explanatory.

Item 18: Activities such as hand games and touching games are included.

Item 19: This item is designed to see if the teacher understands children of the age level which she is teaching. Are they engaged in suitable activities?

Item 20: Does the teacher serve as a model? Does she listen to others? Does she express respect for others? Does she say "Don't interrupt me, I'm listening to Bobby."? Does she say "I'm glad Betty thought of that."?

Item 21: How does the teacher handle property? Does she comment on property rights and the necessity of asking to borrow?

Item 22: Same as Item 21.

Item 23: Does the teacher say "It's nice you asked your father," and "I'm glad you asked me."? Does the teacher talk about adults?

Item 24: Does the teacher handle remarks of the children such as "Mothers are no good," in a positive manner? This item includes the teacher's acknowledging that both mothers and fathers make contributions.

Item 25: Does teacher speak of "we" or "you"? Does she speak of "them across the track" or of "we"? Does she identify with the children?

Item 26: How sensitive is the teacher to the children's frustration? Does the teacher say "It is hard, isn't it?" vs. "Try harder and you can do it."?

Item 27: What does the teacher do about frustrations? Does she talk and let the child talk about it? Does she do other things to relieve frustration?

Item 28: Does the teacher take time to talk over with the child the consequences of his actions? Does the teacher reinforce self-discipline?

Item 29: Does the teacher encourage the child to take the blame for his own actions? Does the teacher stress the importance of one's responsibility in existing social structures? Does she say, "People had to work hard to get that house," etc?

Item 30: An example: Does the teacher say "I know you didn't mean to hit him"?

Item 31: Does the teacher let the child know the school cares about him? Does she respond to the child's ideas although he interrupted the class? Does the teacher acknowledge the child's contributions and his presence? Does she mention his family and their contributions? An example of this item is if a child breaks his toy, does the teacher say "I'm sorry" or hug the child?

Item 32: Does the teacher make such statements as: "One day you will know how," or "We'll learn to do that" or express confidence in the child and emphasize his positive attributes?

Item 33: How does the teacher speak of the child's parents? Does she say "those people" or "So your mother let you come to school dirty again," etc.?

Item 34: This item is not concerned about whether or not a teacher is effective, but if she has techniques to use when emotional emergencies arise. Does she handle all emergencies alike?

Item 35: Self-explanatory.

Item 36: Does the teacher make comments about the fun involved in learning? Does she generate enthusiasm about learning new things to the child?

Item 37: Does the teacher say, "Do this and later we'll get this reward", or "Do this and we'll put it on the board tomorrow"? Does the teacher make references to the future, such as, "In 2 years you can do that", or, "It takes a long time to do that"?

Item 38: This item focuses on specific facets. This is a direct response by the teacher, as "You can do it."

Item 39: Does the teacher help the child to feel that he can take care of himself in time? Does she say "See if you can do it by yourself"? Does the teacher attempt to combat attitudes of the welfare dependency state?

Item 40: Self-explanatory.

Item 41: Self-explanatory.

Item 42: Self-explanatory.

Item 43: Self-explanatory.

Item 44: Deviant behavior is considered acting out, misbehaving, picking the nose, and forms of behavior which call attention to the child.

Item 45: An example: If a bird hops on the classroom window, does the teacher use this event in her teaching?

Item 46: Self-explanatory.

Item 47: Self-explanatory.

The discussion of each item in detail should clarify any questions that the observers may have.

ORF SUPPLEMENTARY SHEET

Date:____________________ Time of observation:__________to________

Time of class: __________to________

Observer's name:____________________Co-observer's name:__________

School district or organization:______________________________

Town: ____________________ Building:____________________

Teacher's name:______________________________ Code number:__________

Teacher aides: Present____ Absent____
Work week (in days)___

Volunteers: Present____Absent___
Work week (in days)___

Student assistants: Present____ Absent____ Work week (Per Person)______

Type of Class______________________________

Others present:_____ Specify:______________________________

Pupils present: Boys_____ Girls_____ Pupils enrolled: Boys____ Girls______

Age range of pupils:_____ to _____ Age of majority of pupils: __________

Ethnic composition of class (nos.): Latin-American_____ Negro_____
Anglo_____ Other_____

Apparent ethnic origin of teacher____________________

Neighborhood in which school is located:____________________

____

Physical appearance of room and its contents:____________________

____

____

Impressions gained from teacher interview: (Assure teacher of confidentiality of interview)

CDERC - PH No. 1

PROJECT HEADSTART CENTER OBSERVER'S RATING FORM

CENTER NO.____________________ Teacher Observed:__________________________

____

Date_________________Time_______ Observer-Rater____________________________

I. Input Items Related to the Child's Cognitive-Symbolic Behaviors

1. Extent to which the teacher insists that the child use verbal communication. (The teacher does not accept nods, gestures, "sign language" in lieu of verbal communication.)

    1. Always (with very rare exceptions) insists that the child use verbal communication.
    2. Usually insists that the child use verbal communication.
    3. Insists on verbal communication more often than she does not insist.
    4. Insists on verbal communication about as often as she does not insist.
    5. Does not insist on verbal communication more often than she does insist.
    6. Usually does not insist that the child use verbal communication.
    7. Never or very rarely insists on verbal communication.

2. Extent to which each child is given the opportunity to organize and to express his ideas in explaining what he is doing.

    1. Each child is given approximately equal opportunity to express himself.
    2. Most of the children are given about an equal opportunity to express themselves.
    3. Somewhat over half of the children are given an equal opportunity.
    4. About half of the children are given an equal opportunity.
    5. Somewhat less than half of the children are given an equal opportunity.
    6. Only a few of the children are given about an equal opportunity to express themselves.
    7. Only one or two (or none) of the children are given an opportunity to express themselves.

3. Extent to which each child is given the opportunity to organize and to express his ideas in answering questions.

    1. Each child is given approximately equal opportunity to express himself.
    2. Most of the children are given about an equal opportunity to express themselves.
    3. Somewhat over half of the children are given an equal opportunity.
    4. About half of the children are given an equal opportunity.
    5. Somewhat less than half of the children are given an equal opportunity.
    6. Only a few of the children are given about an equal opportunity to express themselves.
    7. Only one or two (or none) of the children are given an opportunity to express themselves.

4. Extent to which each child is given the opportunity to organize and to express his ideas in sharing experiences.

    1. Each child is given approximately equal opportunity to express himself.
    2. Most of the children are given about an equal opportunity to express themselves.
    3. Somewhat over half of the children are given an equal opportunity.
    4. About half of the children are given an equal opportunity.
    5. Somewhat less than half of the children are given an equal opportunity.
    6. Only a few of the children are given about an equal opportunity to express themselves.
    7. Only one or two (or none) of the children are given an opportunity to express themselves.

5. Extent to which the teacher emphasizes the environment in which the child finds himself at any given time. (Emphasis on attention, discrimination, making comparisons, drawing conclusions from the immediate environment.)

    1. Almost constant emphasis on world around the child.
    2. Very frequent instances of emphasizing environment.
    3. Much emphasis.
    4. Moderate emphasis.
    5. Some emphasis
    6. Slight emphasis
    7. Little or no emphasis

6. Extent to which teacher pays attention to development of an "elaborated" (formal) language code vs. acceptance of a "restricted" (public) code.

    1. Almost constant attention is paid to developing an elaborated code.
    2. Much attention is given to developing an elaborated code.
    3. Attention is given to developing an elaborated code more often than the restricted code is accepted.
    4. A restricted code is accepted about as frequently as an elaborated code is stressed.
    5. A restricted code is accepted more often than an elaborated code is stressed.
    6. A restricted code is usually accepted.
    7. Little or no attention is given to developing an elaborated code.

7. Extent to which teacher uses complete sentences in communicating with children.

    1. Always, with rare exceptions or none, uses complete sentences.
    2. Frequently uses complete sentences.
    3. Uses complete sentences somewhat more than half of the time.
    4. Uses complete sentences about half of the time.
    5. Uses complete sentences less often than incomplete sentences, phrases, or words.
    6. Seldom uses complete sentences.
    7. Rarely uses complete sentences.

8. Frequency with which teacher attempts to have children use complete sentences in verbal communication.

   1. Always with rare exceptions
   2. Frequently.
   3. More often than not.
   4. About half of the time.
   5. Less often than not
   6. Seldom.
   7. Rarely or never.

9. Extent to which the teacher uses and stresses a variety of verbs.

   1. Almost constant attention is given to this.
   2. Frequent attention is paid to this.
   3. Attention given to this more often than not when opportunity exists.
   4. Attention paid to this about half of the time when opportunity exists.
   5. Moderate amount of attention given to this.
   6. Infrequent attention paid to this.
   7. Little or no attention paid to this.

10. Extent to which the teacher stresses the use of descriptive adjectives.

    1. Almost constant attention is given to this.
    2. Frequent attention is paid to this.
    3. Attention given to this more often than not when opportunity exists.
    4. Attention paid to this about half of the time when opportunity exists.
    5. Moderate amount of attention given to this.
    6. Infrequent attention paid to this.
    7. Little or no attention paid to this.

11. Frequency with which teacher pays specific attention to the importance of following directions. (Gives children opportunities to follow instructions, gives them time to do so, etc.)

    1. Almost constant attention.
    2. Very often.
    3. Frequently.
    4. About half of time when opportunity exists.
    5. Infrequently.
    6. Very seldom.
    7. Never (with one or two exceptions).

12. To what extent does the teacher use multi-sensory stimulation in teaching? (Various combinations of visual, auditory, tactile, olfactory, gustatory stimulation,; other than usual use of words and pictures together.)

    1. Almost constant use of multi-sensory stimulation.
    2. Very frequent use.
    3. Frequent use.
    4. Moderate use.
    5. Occasional use.
    6. Very infrequent use.
    7. No use (with one or two exceptions).

13. To what extent does the teacher use consistently a feedback system in order to develop language facility? (Consistently feeds back corrections, uses models, synonyms etc. so child can copy and correct his own language.)

    1. Almost constant use of feedback.
    2. Very frequent use of feedback.
    3. Frequent use of feedback.
    4. Moderate use of feedback.
    5. Occasional use of feedback.
    6. Very infrequent use of feedback.
    7. No use of feedback (with one or two exceptions).

II. Items Related to the Child's Perceptual-Motor Behavior

14. Degree to which teacher provides for visual discrimination. (Likenesses, differences, details, colors, forms, etc.) (Hunt, 1964; Deutsch, 1963 have both stressed importance of visual discrimination in working with culturally disadvantaged.)

    1. Almost constant provisions.
    2. Many provisions.
    3. Some provisions are made.
    4. Moderate provisions are made.
    5. Few provisions are made.
    6. Very few provisions are made.
    7. Almost no provision.

15. Degree to which teacher provides for auditory discrimination. (Calling attention to differences in pronunciations, enunciation, sounds in the environment, rhymes and jingles.)

    1. Almost constant provisions.
    2. Many provisions.
    3. Some provisions are made.
    4. Moderate provisions are made.
    5. Few provisions are made.
    6. Very few provisions are made.
    7. Almost no provision.

16. Degree to which the teacher attempts to teach the children to listen. (Attention to others, thought to be an important missing factor with disadvantaged children; several studies mention this.)

    1. Almost constant attention paid to this factor.
    2. A great deal of attention paid to this factor.
    3. Much attention paid to this factor.
    4. Moderate attention paid to this factor.
    5. Little attention paid to this factor.
    6. Very slight attention paid to this factor.
    7. No attention paid to this factor.

17. Extent to which the teacher uses physically active situations to promote pupil learning. (Dramatic play, rhythmic games, role playing, puppets, etc.)

    1. Almost constant use.
    2. Very much use.
    3. Much use.
    4. Moderate use.
    5. Little use.
    6. Very slight use.
    7. Almost no use.

18. Extent to which the teacher makes specific provisions for the development of motor skills. (Provides the opportunity, has a variety of activities, emphasizes such activities.) (Activities in addition to those of number 17.)

    1. Almost constant attention paid to this factor.
    2. A great deal of attention paid to this factor.
    3. Much attention paid to this factor.
    4. Moderate attention paid to this factor.
    5. Little attentinn paid to this factor,
    6. Very slight attention paid to this factor.
    7. No attention paid to this factor.

19. Degree to which the physically active activities seem suited to the group participating. (Based on the number of children who seem to be involved from the group.)

    1. Highly suitable (All children involved).
    2. Well suited to group (Only 1 or 2 not involved).
    3. Suitable (3 or 4 not involved).
    4. Questionable (5 or 6 not involved).
    5. Unsuitable (7 or 8 not involved).
    6. Quite unsuitable (9 or 10 not involved).
    7. Highly unsuitable (11 or more not involved).

III. Items Related to the Child's Social Interactions

20. To what extent does the teacher attempt to inculcate in the child respect for the ideas of others?

    1. Almost constant attempts to do so.
    2. Very frequent attempts to do so.
    3. Many attempts to do so.
    4. Some attempts to do so.
    5. Few attempts to do so.
    6. Rare attempts to do so.
    7. No attempts to do so.

21. To what extent does the teacher attempt to inculcate in the child respect for the property of others?

    1. Almost constant attempts to do so.
    2. Very frequent attempts to do so.
    3. Many attempts to do so.
    4. Some attempts to do so.
    5. Few attempts to do so.
    6. Rare attempts to do so.
    7. No attempts to do so.

22. To what extent does the teacher attempt to inculcate in the child respect for the feelings of others ?

    1. Almost constant attempts to do so.
    2. Very frequent attempts to do so.
    3. Many attempts to do so.
    4. Some attempts to do so.
    5. Few attempts to do so.
    6. Rare attempts to do so.
    7. No attempts to do so.

23. To what extent does the teacher encourage the pupils to use an adult (in this case the teacher or parent) as a resource person?

    1. Almost constant attempts to do so.
    2. Very frequent attempts to do so.
    3. Many attempts to do so.
    4. Some attempts to do so.
    5. Few attempts to do so.
    6. Rare attempts to do so.
    7. No attempts to do so.

24. Degree to which the teacher makes specific attempts to develop more realistic concepts (concepts that will be more congruent with those found in the huge majority of American schools and homes) of the roles of male and female in the family. (For Negro children this may be an attempt to off-set the deprecations of maleness to which the children have been exposed; for Latin-Americans this may be an attempt to off-set the effects of extreme male domination to which they may have been exposed.)

    1. Almost constant attempts to do so.
    2. Very frequent attempts to do so.
    3. Many attempts to do so.
    4. Some attempts to do so.
    5. Few attempts to do so.
    6. Rare attempts to do so.
    7. No attempts to do so.

IV. Items Related to the Child's Emotional Development

25. To what extent does the teacher indicate her identification with the group which she teaches? (Choice of words, emphasis on certain values, ways of referring to other social groups or to the children's social group.)

    1. Almost constant identification.
    2. Very frequent instances of identification.
    3, Frequent instances of identification.
    4. Moderate identification.
    5. Some identification.
    6. Slight identification.
    7. No identification.

26. Degree to which the teacher seems to be aware of pupil frustration.

    1. Almost constant indications of awareness.
    2. Very much aware.
    3. Much awareness.
    4. Moderate awareness.
    5. Some awareness.
    6. Slight awareness.
    7. No apparent awareness.

27. Extent to which the teacher seems to have specific techniques for coping with individual pupil's frustrations.

    1. More than five techniques used.
    2. Five techniques used.
    3. Four techniques used.
    4. Three techniques used.
    5. Two techniques used.
    6. One technique used with all situations.
    7. No apparent technique.

    Possible Techniques:
    a. Changing tasks for pupil
    b. Turning to physical activity
    c. Encouraging child to continue
    d. "We all feel that way sometime, I do too, but...etc."

28. Extent to which the teacher attempts to help the child develop self discipline.

    1. Almost constant attention given to this.
    2. A great deal of attention given to this
    3. Much attention given to this.
    4. Moderate attention given to this.
    5. Little attention given to this.
    6. Very slight attention given to this.
    7. No attention given to this.

29. Extent to which the teacher attempts to inculcate in the child acceptance of personal responsibility vs. placing of blame on others.

1. Almost constant attention given to this.
2. A great deal of attention given to this.
3. Much attention given to this.
4. Moderate attention given to this.
5. Little attentinn given to this.
6. Very slight attention given to this.
7. No attention given to this.

30. Extent to which the teacher responds to the consequences of an act vs. responding to the child's intent.
(Kohn, 1959, reported that working class parents focus on the act itself, middle class parents on the child's intent.)

1. Always focuses on the act itself.
2. Usually focuses on the act itself.
3. Focuses on the act more often than on intent.
4. Focuses on act and intent about equally.
5. Focuses on intent more than on act.
6. Usually focuses on intent.
7. Always focuses on intent.

31. Extent to which the teacher indicates to the child verbally that "the school cares."
(Krugman, 1961, reported programs for culturally deprived in New York produced changed self-concepts by given children "the feeling that the school cared and by having the children succeed.")
(Of course, there are many ways, non-verbal, of showing this; these are picked up in other items.)

32. Extent to which the teacher uses specific references or techniques to combat the negative self-image often found among culturally disadvantaged children, especially Negro children.

1. Almost constant attempts to do so.
2. Very frequent attempts to do so.
3. Many attempts to do so.
4. Some attempts to do so.
5. Few attempts to do so.
6. Rare attempts to do so.
7. No attempts to do so.

33. Extent to which the teacher indicates respect for the children's families. (Use of words, phrases, references, tone of voice, inflections.)

1. Complete and sincere respect.
2. Very much respect.
3. Much respect.
4. Moderate respect.
5. Some respect.
6. Slight respect.
7. Little or no respect (they are "those people")

34. Extant to which teacher seems to have specific techniques for handling emotional problems of children.

1. More than five techniques used
2. Five techniques used.
3. Four techniques used.
4. Three techniquss used.
5. Two techniques used.
6. One technique used with all situations.
7. No apparent technique

Possible techniques:
a. Changing tasks for pupil
b. Turning to physical activity
c. Encouraging child to continue
d. "We all feel that way sometime, I do too, but...etc."

35. To what extent is there physical contact between teacher and children? (Putting arm around child, "hugging him up," hands on shoulder or arm, etc.)

1. Almost constant contact.
2. Very frequent contact.
3. Frequent contact.
4. Some contact.
5. Little contact.
6. Very little contact.
7. Practically no contact or none.

V. Items Related to the Motivation of the Child

36. Degree to which the teacher uses specific techniques to develop an enthusiasm for learning. (For seeking new knowledge, for feeling a sense of satisfaction from learning, etc.)

1. Almost constant attention paid to this.
2. A great deal of attention given to this.
3. Much attention given to this.
4. Moderate attention given to this.
5. Little attention given to this.
6. Very slight attention given to this.
7. No attention given to this.

37. Degree to which the teacher attempts to develop in the children acceptance of and familiarity with delayed goal gratification. (Future-time orientation)

    1. Almost constant attention paid to this.
    2. A great deal of attention given to this.
    3. Much attention given to this.
    4. Moderate attention given to this.
    5. Little attention given to this.
    6. Very slight attention given to this.
    7. No attention given to this.

38. Degree to which the teacher creates an atmosphere of "possibility" to replace the attitude of passivity and defeatism which is common among children from impoverished areas.

    1. Almost constant attention paid to this.
    2. A great deal of attention given to this.
    3. Much attention given to this.
    4. Moderate attention given to this.
    5. Little attention given to this.
    6. Very slight attention given to this.
    7. No attention given to this.

39. Degree to which the teacher creates an atmosphere or attitude of self-dependency rather than an atmosphere or attitude of "other-dependency." (Verbal expressions, conversations, encouragement of self-dependency, attempts to combat attitude that "somenne" will take care of all the children's needs.)

    1. Almost constant attention paid to this.
    2. A great deal of attention given to this.
    3. Much attention given to this.
    4. Moderate attention given to this.
    5. Little attention given to this.
    6. Very slight attentinn given to this.
    7. No attention given to this.

40. Extent to which the teacher uses material vs. non-material rewards for pupil responses or behavior. (Several studies have shown there is a difference in the use of such rewards according to social class.)

    1. Uses material rewards only (Stars, first in line for milk, etc., a prize).
    2. Uses material rewards most of time.
    3. Uses material rewards more than non-material rewards.
    4. Uses both about equally.
    5. Uses non-material rewards more than material rewards.
    6. Uses non-material rewards most of time.
    7. Uses non-material rewards only (praise, a smile, a comment).

41. Degree to which the teacher uses negative vs. positive reinforcement in learning situations. (Use of "no, that's wrong, now - you missed that yesterday, etc., vs. good, that's a good try, keep on, you're doing fine, ect.")

1. Very frequent positive reinforcement.
2. Frequent positive reinforcement.
3. More positive than negative reinforcement.
4. The two used about equally.
5. More negative than positive reinforcement.
6. Frequent negative reinforcement.
7. Very frequent negative reinforcement.

42. Degree to which the teacher uses negative vs. positive reinforcement in behavior situations.

1. Very frequent positive reinforcement.
2. Frequent positive reinforcement.
3. More positive than negative reinforcement.
4. The two used about equally.
5. More negative than positive reinforcement.
6. Frequent negative reinforcement.
7. Very frequent negative reinforcement.

VI. Items Which May Relate to Several of the Above Categories

(Many of the above items are rather obviously better placed in two or more categories; the following are different in that they seek to fucus more on the teacher as a person.)

43. Extent to which the teacher seems to depend on expressions of appreciation or affection from the children.

1. Highly dependent.
2. Much dependence.
3. Moderate dependence.
4. Slight dependence.
5. Little or no dependence.

44. Degree to which the teacher displays tolerance for deviant behavior.

1. Extremely tolerant.
2. Much tolerance.
3. Tolerant.
4. Moderate tolerance.
5. Some tolerance.
6. Slight tolerance.
7. Little or no tolerance.

45. Extent to which the teacher uses unplanned incidents as an opportunity for learning vs. consistent focusing on the planned task at hand.

1. Almost constant attempts to do so.
2. Very frequent attempts to do so.
3. Many attempts to do so.
4. Some attempts to do so.
5. Few attempts to do so.
6. Rare attempts to do so.
7. No attempts to do so.

46. What type of punishment does this teacher use for behavior problems?

1. Physical punishment.
2. Isolation within classroom.
3. Isolation outside of classroom.
4. "Scolding," warning, threatening.
5. Group pressure.
6. Loss of privilege.
7. "Talking to the child" (reasoning).
8. Calling in other adults.
9. Diverting child to a new activity.

47. Extent to which the teacher seeks to develop a "questioning Orientation" on the part of the child. (By use of herself as a model, by helping the child learn how to frame questions, by emphasizing questioning attitudes, etc.)

1. Almost constant attention paid to this.
2. A great deal of attention given to this.
3. Much attention given to this.
4. Moderate attention is given to this.
5. Little attention is given to this.
6. Very slight attention is given to this.
7. No attention is given to this.

Form 20b

PROJECT HEADSTART

Your Name (Please Print) Mr. Miss Mrs.______________________________ (Last) (First) (Middle)   Code No.__________

Name of School:________________________ School District:____________

City:______________________________ State:________________

AUTOBIOGRAPHICAL DATA FORM

Orientation

Each of you is asked to fill in this Autobiographical Form in order that there may be more useful information concerning the teachers who are involved in Project Headstart. The data which you supply will be used only to establish groups of teachers of similar education, age, experience and so on. We are absolutely not interested in the responses of individual teachers as individuals, but useful group comparisons cannot be made without first obtaining information from each of you individually.

The usefulness of this information, like the success of Project Headstart, depends on you. Your answers to the items in this form are extremely important! The more frankly you answer these items, the more valuable your information will be.

Special Note

This form has been designed so that your responses can be punched directly into IBM punchcards for machine processing. Your name will be given a "Code Number" before your responses are transferred to punch cards. After your answers have been punched, this cover sheet, bearing your name, will be destroyed!

The information which you supply about yourself will not be made public, and no specific person will be identified in any of the research analyses.

How to Answer

1. You may use either a pen or a pencil in marking your answers in this Form.
2. This Form is not a test! However, most of it is written in multiple choice form, because this facilitates punching the answers on IBM cards. You are requested to select one of the several possible choices given in each item.
3. Please record your answers by encircling the number of the one choice for each item which you consider to be the best, or most accurate, answer for you.
4. Please be sure to answer all of the items. And do read each item, including each of the possible responses, carefully before answering. Where blank spaces are provided, please write your answer, when relevant.
5. Work just as rapidly as possible! Generally, your first reaction is adequate. If you do not know the exact answer to an item, please give your best estimate.

1. Your present age in years:
    1. 21-25 years
    2. 26-30
    3. 31-35
    4. 36-40
    5. 41-45
    6. 46-50
    7. 51-55
    8. 56-60
    9. 61-65
    10. Other: ________ years (Please specify)

2. To which ethnic or racial group do you belong?
    1. Negro
    2. Latin-American
    3. Anglo
    4. Other ____________

3. Your present marital status:
    1. Single
    2. Married
    3. Separated
    4. Divorced
    5. Widowed
    6. Remarried

4. How many children do you have?
    1. None
    2. One
    3. Two
    4. Three
    5. Four
    6. Five
    7. Six or more

5. Typical kind of community in which you lived longest as a child:
    1. Rural or farm
    2. Less than 500 people
    3. 500-2500 people
    4. 2501-7500 people
    5. 7501-10,000 people
    6. 10,001-25,000 people
    7. 25,001-100,000 people
    8. 100,001-500,000 people
    9. More than 500,000 people

6. How many times did your family move from one community to another before you reached 18 years of age?
    1. Family did not move
    2. Family moved only once
    3. Moved 2-3 times
    4. Moved 4-6 times
    5. Moved more than 6 times

7. What kinds of moves did your family make most often?
    1. From one city to another
    2. From one state to another
    3. To another neighborhood in the same community
    4. From one country to another

8. How many brothers, living or deceased, do you have?
    1. None
    2. One
    3. Two
    4. Three
    5. Four
    6. Five
    7. Six
    8. Seven
    9. More than 7

9. How many sisters, living or deceased, do you have?
    1. None
    2. One
    3. Two
    4. Three
    5. Four
    6. Five
    7. Six
    8. Seven
    9. More than 7

10. What was your father's age when you were born?
    1. 18 or less
    2. 19-21 years
    3. 22-25 years
    4. 26-30 years
    5. 31-36 years
    6. 37-44 years
    7. 45-55 years
    8. Over 55 years

11. What was your mother's age when you were born?
    1. 18 or less
    2. 19-21 years
    3. 22-25 years
    4. 26-30 years
    5. 31-36 years
    6. 37-44 years
    7. 45-55 years
    8. Over 55 years

12. If your parents were separated by death, divorce, or other circumstances, what was your age when this occurred?
    1. Under one year
    2. One to three years
    3. Three to five years
    4. Five to seven years
    5. Seven to nine years
    6. Nine to eleven years
    7. Eleven to thirteen years
    8. Thirteen to fifteen years
    9. Over fifteen years
    10. Were not separated

13. As a child, about how much traveling did you and your family do? We traveled:
    1. Almost constantly; true transients
    2. Very frequently; several long trips each year
    3. Frequently; one long trip and some shorter ones each year
    4. One long trip each year
    5. Average--2 week vacation in summer
    6. Infrequently--a short trip each 2 or 3 years
    7. Rarely--one or two fairly short trips in 8 or 10 years
    8. Never

14. During elementary school years, as you recall them, about how often did you consult with your teachers regarding things that were important to you?
    1. Never
    2. Rarely
    3. Occasionally
    4. Fairly often
    5. Frequently
    6. Very frequently

15. What was the general state of your health during elementary school years?
    1. Extremely bad
    2. Very poor
    3. Poor
    4. Average (Neither good nor bad)
    5. Good
    6. Excellent
    7. Virtually perfect

16. What was the highest level of formal education completed by your father?
    1. Grade school or less
    2. High school, but did not graduate
    3. High school diploma (graduated)
    4. Commercial, trade, or similar schooling *beyond* high school
    5. Some college, but did not graduate
    6. College graduate (Bachelor's degree)
    7. Some postgraduate study, but no graduate degree
    8. Master's or other postgraduate degree but not a doctorate
    9. Doctor's degree (Ph.D., M.D., *et al*.)

17. What is (was) the *specific occupation* of your father during most of the time you were growing up? Write the exact occupation here, please:

    (*Example*: Farmer, owner, 150 acres)

18. What is (was) the *specific occupation* of your paternal grandfather during most of the time you were growing up? Write the exact occupation here, please:

    (*Example*: Farmer, owner, 150 acres)

19. Using the classification system below, indicate the nature of your father's main specific occupation during most of the years you were growing up. (Circle appropriate number)

1. A job requiring no specialized education--for example, Watchman, Hospital Attendant, Laborer, Farm Worker, Domestic, et al.

2. Job requiring some training and experience--e.g., Fireman, Typist, Truck Driver, Waiter, Farm Tenant.

3. Job requiring some specialized training, an apprenticeship, or considerable experience--e.g., Barber, Chef, Aviator, Cashier, Photographer, Carpenter, Clerical or Sales Work, Policeman, Mechanic, Bookkeeper, Electrician, Stenographer.

4. A job of a semi-professional nature requiring high school education plus technical school or equivalent--e.g., Contractor; Minister without a college degree; Chiropractor; Police Sergeant; Small Business Owner; Employment Manager; Registered Nurse; City Inspector; Auto, Bond, Insurance, and other Sales; County Agent; Technician.

5. Professional and Managerial with middle-level responsibilities--jobs requiring college degree or equivalent, but not a graduate degree--e.g., Elementary or High School Teacher; Librarian; Editor; Accountant; CPA; Veterinarian; Pharmacist; Social Worker; Large Landowner; Office or Department Manager.

6. Professional and Managerial with upper-level, independent responsibilities--jobs requiring graduate degrees, including the doctorate or equivalent, when relevant--e.g., Professional Engineer; College Professor with Ph.D. or equivalent; Industrial Tycoon; Superintendent of Large School System; Physician or Surgeon; Creative Artists; U. S. President and Cabinet Officers.

20. Using the classification system given in item number 19, what was (is) the chief occupation of your paternal grandfather?

1. Job requiring no specialized education
2. Job requiring some training and experience
3. Job requiring some special education, apprenticeship, or considerable experience
4. Job of a semi-professional nature, or small business owner
5. Professional or Managerial, middle level
6. Professional or Managerial, Independent responsibility

21. Highest level of formal education completed by your mother?

1. Grade school or less
2. High school, but did not graduate
3. High school diploma (graduated)
4. Commerical, trade, or similar schooling beyond high school
5. Some college, but did not graduate
6. College graduate (Bachelor's degree)
7. Some postgraduate study, but no graduate degree
8. Master's degree
9. Doctor's degree (Ph.D., M.D., et al.)

22. How many times were you elected or appointed to offices in organizations of which you were a member while in high school?

1. Never
2. Once
3. Twice
4. Three times
5. Four times
6. Five to seven times
7. Eight to ten times
8. More than ten times

23. How many students were in your high school graduating class?

1. 25 or fewer
2. 26-50
3. 51-99
4. 100-200
5. 201-300
6. 301-500
7. 501-800
8. more than 800

24. What was your overall high school grade average?

1. Below C-
2. C-
3. C
4. C+
5. B-
6. B
7. B+
8. A-
9. A

25. Among the following, which is the highest group or honor in which you were included in your high school graduating class?

1. Lowest 25 per cent of class
2. Lower half of class
3. Upper half of class
4. Upper one-third of class
5. Upper 25 per cent of class
6. Upper 10 per cent of class
7. Salutatorian: 2nd Highest
8. Valedictorian: highest student

26. During high school, how many organizations or clubs did you participate in actively? (Social, academic, honorary, *et al*.)

1. None
2. One
3. Two
4. Three
5. Four
6. Five
7. Six or seven
8. Eight to ten
9. More than ten

27. How many *close* friends did you have during high school years?

1. None
2. One
3. Two
4. Three
5. Four
6. Five
7. Six or seven
8. Eight to ten
9. More than ten

28. When did you first *think about* becoming a teacher?

1. Before entering grade school
2. While in elementary school
3. During junior high school
4. When in high school
5. As a college freshman or sophomore
6. As a college junior or senior
7. Immediately after college graduation
8. After college *and* after trying out another occupation
9. Always planned to teach

29. What is (was) your father's religious, or Church, affiliation?

Note: First encircle the correct *group* number, then underline the correct *denomination*.

1. Jewish
2. Roman Catholic
3. Unitarian; Universalist
4. Episcopalian; Lutheran; Presbyterian
5. Congregational; Methodist
6. Baptist; Disciples of Christ (Christian Church); Church of Christ
7. Quaker; Christian Science; Mormon
8. Pentecostal; Gospel Tabernacle; Holiness; Jehovah's Witnesses
9. Other:______________________________
10. Not affiliated with any Church

30. Concerning Church attendance, Father:

1. Did not attend
2. Attended services extremely rarely
3. Attended Church only on occasion
4. Attended Church about once a month
5. Attended about twice a month
6. Regularly attended general Sunday service only
7. Regularly attended *all* Sunday services
8. Regularly attended all Sunday services and others during the week in addition.

31. How would you characterize your father with respect to religious matters?

    1. Religion was the dominant concern of his life
    2. Religious concerns were very important to him, but not predominant
    3. Religious matters were neither of more nor less concern to him than other matters, but he was not indifferent
    4. He was more or less indifferent to religious matters
    5. He was sometimes impatient with religious matters and concerns
    6. He regarded religious matters as irrelevant to him
    7. He rejected religion and its concerns

32. What is (was) your mother's religious, or Church, affiliation?

    Note: First encircle the correct group number, then underline the correct denomination.

    1. Jewish
    2. Roman Catholic
    3. Unitarian; Universalist
    4. Episcopalian; Lutheran; Presbyterian
    5. Congregationalist; Methodist
    6. Baptist; Disciples of Christ (Christian Church); Church of Christ
    7. Quaker; Christian Science; Mormon
    8. Pentecostal; Gospel Tabernacle; Holiness; Jehovah's Witnesses
    9. Other:________________________
    10. Not affiliated with any Church

33. Concerning Church attendance, Mother:

    1. Did not attend
    2. Attended services extremely rarely
    3. Attended Church only on occasion
    4. Attended Church about once a month
    5. Attended about twice a month
    6. Regularly attended general Sunday service only
    7. Regularly attended all Sunday services
    8. Regularly attended all Sunday services and others during the week in addition

34. How would you characterize your mother with respect to her concern for religious matters?

    1. Religious matters were the dominant concern in life
    2. Religious concerns were very important to her, but not predominant
    3. Religious matters were neither of more nor less concern to her than other matters, but she was not indifferent
    4. She was more or less indifferent to religious matters
    5. She was sometimes impatient with religious matters and concerns
    6. She regarded religious matters as irrelevant to her
    7. She rejected religion and its concerns

35. In your childhood home, did all the family attend Church services together?

    1. Almost always
    2. Regularly
    3. Quite often
    4. About half the time
    5. Occasionally
    6. Only irregularly
    7. Rarely
    8. Never

36. What is your religious, or Church, affiliation?
    1. Jewish
    2. Roman Catholic
    3. Unitarian or Universalist
    4. Episcopalian, Lutheran, Presbyterian
    5. Congregational, Methodist
    6. Baptist, Disciples of Christ (Christian Church), Church of Christ
    7. Quaker, Christian Science, Mormon
    8. Pentacostal, Gospel Tabernacle, Holiness, Jehovah's Witnesses
    9. Other:______________________

37. Concerning church attendance, I:
    1. no longer attend services
    2. attend services extremely rarely
    3. attend church only on occasion
    4. attend church about once a month
    5. attend about twice a month
    6. regularly attend the general service on Sunday only
    7. regularly attend all services on Sunday
    8. regularly attend all Sunday services and other services during the week in addition

38. How would you characterize yourself with respect to your concern for religious matters?
    1. Religious matters are the dominant concern in my life
    2. Religious concerns are very important to me, but are not predominant ones
    3. Religious matters are neither of more nor less concern to me than are other matters, but I'm not indifferent
    4. I am more or less indifferent to religious matters and concerns
    5. I am sometimes impatient with religious matters and concerns
    6. I regard religious matters as irrelevant to me
    7. I reject religion and its concerns

39. What was your major in college?
    1. Elementary education
    2. Secondary education
    3. Physical education
    4. Art or music (education)
    5. Social Studies
    6. English
    7. Math or science
    8. Home economics or related area
    9. Other:__________________________

40. If you were to return to college, would you study the same major field?
    1. Definitely not study same major
    2. Probably not study same major
    3. Uncertain
    4. Probably would study same major
    5. Definitely would study same major

41. The grade average I made during my freshman year in college: (A=4.00; B=3.00; C=2.00; D=1.00; F=0.00)
    1. .50 to .99
    2. 1.00 to 1.49
    3. 1.50 to 1.99
    4. 2.00 to 2.49
    5. 2.50 to 2.99
    6. 3.00 to 3.24
    7. 3.25 to 3.49
    8. 3.50 to 3.74
    9. 3.75 to 4.00

42. When I completed college, my overall grade average was: (A=4.00; B=3.00 C=2.00; D=1.00; F=0.00)
    1. 1.50 to 1.99
    2. 2.00 to 2.24
    3. 2.25 to 2.49
    4. 2.50 to 2.74
    5. 2.75 to 2.99
    6. 3.00 to 3.24
    7. 3.25 to 3.49
    8. 3.50 to 3.74
    9. 3.75 to 4.00

43. About what percentage of your college expenses did you earn by working?
    1. None
    2. 5-10 per cent
    3. 10-25 per cent
    4. 25-40 per cent
    5. 40-60 per cent
    6. 60-75 per cent
    7. 75-90 per cent
    8. 90-95 per cent
    9. 100 per cent

44. How long have you been a teacher?

1. This is my first year
2. 1 to 5 years
3. 6 to 10 years
4. 11 to 15 years
5. 16 to 20 years
6. 21 to 25 years
7. 26 to 30 years
8. 31 to 35 years
9. 36 to 40 years
10. 40 years or more

45. How many years have you taught primarily Anglo children?

1. None
2. 1 year
3. 2 years
4. 3 years
5. 4 years
6. 5 years
7. 6-9 years
8. 10-14 years
9. 15 years or longer

46. How many years have you taught primarily Negro children?

1. None
2. 1 year
3. 2 years
4. 3 years
5. 4 years
6. 5 years
7. 6-9 years
8. 10-14 years
9. 15 years or longer

47. How many years have you taught primarily Latin-American children.

1. None
2. 1 year
3. 2 years
4. 3 years
5. 4 years
6. 5 years
7. 6-9 years
8. 10-14 years
9. 15 years or longer

48. In how many schools have you taught during your career?

1. One
2. Two
3. Three
4. Four
5. Five
6. Six
7. Seven
8. Eight
9. Nine or more

49. How long have you taught in your school district?

1. This is first year
2. This is second year
3. This is third year
4. This is fourth year
5. This is fifth year
6. Six to ten years
7. Eleven to fifteen years
8. More than fifteen years

50. Your present state of health:

1. Extremely bad
2. Very poor
3. Poor
4. Average (neither good nor poor)
5. Good
6. Excellent
7. Virtually perfect

51. What is the specific occupation of your spouse? Write the exact occupation here, please:

____

____

(Example: Farmer, owner, 150 acres)

52. Using the classification system in item 19, indicate the nature of your spouse's main specific occupation. (Circle appropriate number)

1. Job requiring no specialized education
2. Job requiring some training and experience
3. Job requiring some special education and apprenticeship or considerable experience
4. Job of a semi-professional nature, or small business owner
5. Professional or Managerial, middle level
6. Professional or Managerial, Independent responsibility
7. Housewife

53. What is the highest level of formal education completed by your spouse?

1. Grade school or less
2. High school, but did not graduate
3. High school diploma (graduated)
4. Commercial, trade, or similar schooling beyond high school
5. Some college, but did not graduate
6. College graduate (Bachelor's degree)
7. Some postgraduate study, but no graduate degree
8. Master's degree
9. Doctor's degree (Ph.D., M.D., et al.)

54. If you had it to do over again, would you go into teaching?

1. Definitely yes
2. Probably yes
3. Uncertain
4. Probably not
5. Definitely not

55. Assuming that she had the necessary personal characteristics, would you encourage a daughter to be a teacher?

1. Definitely yes
2. Probably yes
3. Uncertain
4. Probably not
5. Definitely not

56. Assuming that you had a son with the necessary personal qualities, would you encourage him to be a teacher?

1. Definitely yes
2. Probably yes
3. Uncertain
4. Probably not
5. Definitely not

57. During the past year (1964-65) I taught in a school where the majority of the pupils were from the following socioeconomic group:

1. The most underprivileged and poverty stricken
2. The group generally considered to be lower class
3. The group which is on the lower fringe of the middle class
4. The group generally considered to be middle class
5. The group considered to be upper middle or upper class.
6. There was a real mixture of socioeconomic groups

58. During the past year (1964-65) I taught a class in which a majority of the pupils came from the following socioeconomic group:

1. The most underprivileged and poverty stricken
2. The group generally considered to be lower class
3. The group which is on the lower fringe of the middle class
4. The group generally considered to be middle class
5. The group considered to be upper middle or upper class
6. There was a real mixture of socioeconomic groups

59. During the past year my school contained approximately the following proportion of Negro pupils.

1. 100% (with "1 or 2" exceptions)
2. 90%
3. 75%
4. 50%
5. 25%
6. 10%
7. 0% (with "1 or 2" exceptions)

60. During the past year my school contained approximately the following proportion of Latin-American pupils.

1. 100% (with "1 or 2" exceptions)
2. 90%
3. 75%
4. 50%
5. 25%
6. 10%
7. 0% (with "1 or 2" exceptions)

61. During the past year my school contained approximately the following proportion of Anglo pupils.

1. 100% (with "1 or 2" exceptions)
2. 90%
3. 75%
4. 50%
5. 25%
6. 10%
7. 0% (with "1 or 2" exceptions)

Form 24b

PROJECT HEADSTART PERSONNEL

EXPERIENCE AND ATTITUDE SURVEY

It is important to have adequate information about the groups of teachers who will be working in Project Headstart. Your experiences, your attitudes, and your opinions are highly valuable. Only you can speak for yourself. Please fill in the following form frankly and accurately. If you are not sure of an answer, give the best approximation.

Select the one best answer for each question.

1. How did you first learn about Project Headstart?

    1. From professional reading material
    2. From a newspaper
    3. From T.V. or radio
    4. From another teacher
    5. From a person outside the teaching professiona
    6. At a teacher's meeting
    7. From the teachers' bulletin board
    8. From my principal or other school official

2. Which of the following would be the most accurate statement concerning your participation in Project Headstart?

    1. My principal (or other administrator) insisted that I take part.
    2. My principal (or other administrator) urged me to take part.
    3. My principal (or other administrator) simply suggested that I take part.
    4. My principal (or other administrator) merely asked if I would like to take part.
    5. My principal (or other administrator) called for volunteers to take part.
    6. I asked about the program before our principal mentioned it and I later decided to volunteer.
    7. I decided to volunteer for Project Headstart as soon as I found out about it. This was before our principal mentioned it.

3. How much experience have you had teaching the kinds of children you believe will be in Project Headstart?

    1. No experience
    2. 1 year of experience
    3. 2 years of experience
    4. 3 years of experience
    5. 4 years of experience
    6. 5 years of experience
    7. 6-9 years of experience
    8. 10-14 years of experience
    9. 15 or more years of experience

4. How well do you feel that you really identify yourself with so called "culturally deprived" children?

   1. I find it almost impossible to identify with such children.
   2. I try to help them but find it extremely hard to understand the attitudes, ideas, and ways of living of these people.
   3. I try to understand these people but often find that I don't.
   4. If I study them carefully I find that I can really begin to understand and accept them.
   5. At times I can identify with them, but just as often I can't.
   6. I find that I usually understand and accept their attitudes, behaviors, and way of living.
   7. I can accept the culturally deprived, communicate with them and usually I am accepted by them; I believe I understand.
   8. I feel that I usually can identify with these children; it's not a matter of thinking but of feeling.
   9. I feel that I identify closely most of the time with these children.

5. To what extent do you believe the real problems of the culturally deprived are understood by most of those who try to help them?

   1. Practically not understood at all.
   2. Understood only to a slight degree.
   3. There is only moderate understanding.
   4. There is rather good understanding.
   5. There is a moderately high degree of understanding.
   6. There is much understanding.
   7. There is almost complete understanding.

6. How would you describe the neighborhood where you spent most of your own childhood?

   1. Predominantly Anglo.
   2. Largely Anglo with a substantial proportion (about 1/4 to 1/3) of Negro families.
   3. Largely Anglo with a substantial proportion of Latin-American families.
   4. Predominantly Negro.
   5. Largely Negro with a substantial proportion of Anglo and/or Latin-American families.
   6. Predominantly Latin-American.
   7. Largely Latin-American with a substantial proportion of Anglo and/or Negro families.
   8. Predominantly Anglo but with substantial proportions of both Negro and Latin-American families.

7. How would the classes you attended as an elementary school child best be described?

    1. The classes had children from different ethnic groups in about equal numbers, and this was an accepted feature of the school.
    2. The classes had children from all ethnic groups, although most were from one ethnic group. All got along well together.
    3. The classes were mostly from one ethnic group, the pupils from other ethnic groups formed blocs, or small groups, within the school.
    4. The classes were nearly all from one ethnic group, though sometimes there would be pupils from other ethnic groups. However, they were an integral part of the class.
    5. The classes were nearly all from one ethnic group, but sometimes there would be pupils from another ethnic group who were rather set apart.
    6. The classes were composed entirely of pupils from one ethnic group.

8. To what extent would you say that the pupils of the elementary school which you attended were similar to the pupils whom you now teach in respect to ethnic origin.

    1. Almost exactly the same.
    2. Alike except for slight differences.
    3. More similar than dissimilar.
    4. About as much similarity as dissimilarity.
    5. More dissimilar than similar.
    6. Similar to only a slight degree.
    7. Almost completely dissimilar.

9. How long have you been really aware of the effects of cultural deprivation?

    1. Only for the past year.
    2. For 2 or 3 years.
    3. For 4-7 years.
    4. For 8-11 years.
    5. For 12 years or longer.

10. When do you remember first being aware of the effects of cultural deprivation on children?

    1. Before I even started to school.
    2. When I was in elementary school.
    3. When I was in junior high school.
    4. When I was in high school.
    5. When I was in college.
    6. When I first began to teach.
    7. After I had taught for at least one year.

11. Which one of the following comes closest to describing your family while you were growing up?

    1. Probably lived at a poverty level; we knew the problems of such a situation.
    2. Probably lived at a poverty level, but we didn't consider it that.
    3. "Poor but honest," it was a real struggle.
    4. Had a hard time attempting to provide those things which "middle class" standards seemed to call for.
    5. Were able to live comfortably at a middle class level.
    6. Were considerably better off than most of the people in our town.
    7. Were relatively wealthy.

12. What would you select as the one factor which is likely to be of most help to the culturally deprived?

    1. Enough help from sources outside this group to allow them to "get on their feet" again and do for themselves.
    2. Completely equal economic opportunities.
    3. Completely equal educational opportunities.
    4. Stop considering them as a seperate group and just accept them as people.
    5. Finding some way to motivate these people so that they will help themselves.
    6. Helping these people become better assimilated into the dominant groups in America.
    7. Helping other people understand the problems of the culturally deprived.
    8. Recognizing that the culturally deprived comprise a recognizable group and there should be educational and economic opportunities to take account of this fact.
    9. Give them opportunities to develop and to keep their self respect and they will help themselves.

13. During your childhood to what extent was cultural deprivation (and the problems connected with it) discussed in your family.

    1. Never
    2. Rarely
    3. I remember several times when they were discussed.
    4. They were a topic of conversation like a great many other things.
    5. Such problems were discussed fairly often.
    6. Such problems were frequently discussed.
    7. I remember that this was one of the major topics of conversation.

14. To what extent are you a memb r of organizations (church, club, political association not including political parties, etc.) which are actively concerned with the problems of the culturally deprived.

1. Member of no such organization.
2. Member of 1 such organization.
3. Member of 2 such organizations.
4. Member of 3 such organizations.
5. Member of 4 such organizations.
6. Member of 5 such organizations.
7. Member of 6 or more such organizations.

15. At the present time which of the following might best describe part of what you feel about Project Headstart.

1. We are starting much too quickly with too little knowledge of the problems involved and of what to do.
2. We should wait until we are better organized and know better how to meet the problems.
3. Things seem sort of rushed, but we are about as ready as we will ever be.
4. Now is a good time to start; we can learn as we go along.
5. Nothing is gained by delaying, we know what's to be done and a great deal about how to do it.
6. We are going too slow now; we know what to do; let's do it.
7. What we need is action, not talk; more speed, not less.

16. Where should the greatest effort be made to deal with the problems of cultural deprivation? Select the three you consider most important using the numbers 1, 2, and 3 to show the 3 you think are the most important places.

_____ 1. In the home.
_____ 2. In the neighborhood
_____ 3. In the entire city or town.
_____ 4. In the schools.
_____ 5. In churches and religious organizations.
_____ 6. In economic groups and in job situations (Chamber of Commerce, labor unions, industrial plants).
_____ 7. Wherever the people are---in the fields, on the roads, in a camp.

17. To what extent do you read magazine and newspaper articles, books, and other material dealing with cultural deprivation.

1. Never
2. Rarely
3. Occasionally
4. Fairly often
5. Frequently
6. Very frequently

18. If you were given the opportunity would you go into full-time work with the culturally deprived? (Full-time for a teacher would mean teaching only these children.)

    1. No, not at this time.
    2. Probably not, but might consider it.
    3. I would give it some hard thought, but would not jump at the chance.
    4. Am really undecided.
    5. I would want to know much more, but might be talked into it.
    6. Probably so, but would want to think it over.
    7. Definitely yes.

19. To what extent do the people in the community in which you teach show concern about poverty and its effects.

    1. Virtually no real concern
    2. Little concern
    3. Moderate concern
    4. Great concern
    5. Extreme concern

20. To what extent are the teachers in your school really concerned about poverty and its effects.

    1. Virtually no real concern
    2. Little concern
    3. Moderate concern
    4. Great concern
    5. Extreme concern

21. How successful do you think this summer's Headstart program will be, in general, upgrading the educational and personal development of the children it reaches.

    1. Highly successful
    2. Much more successful than unsuccessful
    3. More successful than unsuccessful
    4. About as successful as unsuccessful
    5. Less successful than unsuccessful
    6. Much less successful than unsuccessful
    7. Highly unsuccessful

22. How successful do you think you will be this summer in working with the pupils in your Headstart class?

    1. Highly successful
    2. Much more successful than unsuccessful
    3. More successful than unsuccessful
    4. About as successful as unsuccessful
    5. Less successful than unsuccessful
    6. Much less successful than unsuccessful
    7. Highly unsuccessful

23. Assume that you will have 15 pupils in your Headstart class this summer; what proportion do you think will be significantly helped by the program?

    1. 14 out of 15
    2. 12 out of 15
    3. 9 out of 15
    4. 6 out of 15
    5. 3 out of 15
    6. 1 out of 15

24. In general, what proportion of the pupils across Texas in this summer's Headstart program will be significantly helped by the program?

    1. All of them (with a very few exceptions)
    2. Nearly all
    3. Far more than are not helped
    4. More helped than are not helped
    5. Approximately half
    6. More not helped than are helped
    7. Far more not helped than are helped
    8. Only a few
    9. Practically none

25. In the school in which I teach, the question of ethnic background can be described in this way.

    1. Little or no attention is paid to this.
    2. At times some attention is paid to this.
    3. This receives attention less frequently than it does not receive attention.
    4. This seems to receive attention about as often as it doesn't.
    5. It receives attention more often than it does not.
    6. Attention is given to this rather frequently.
    7. Much attention is given to this.

26. To what extent do you feel you have been successful in working with pupils from various ethnic groups.

    1. Not very successful.
    2. Some success but many failures.
    3. Probably a few more failures than successes.
    4. About as many successes as failures.
    5. Probably a few more successes than failures.
    6. Some failures but many successes.
    7. Highly successful.
    8. Have never worked with children from different groups.

27. ~~To what extent~~ do you feel you would be successful in working with pupils from various ethnic groups.

    1. Not very successful.
    2. Some success but many failures.
    3. Probably a few more failures than successes.
    4. About as many ~~successes as failures.~~
    5. Probably a few more successes than failures.
    6. Some failures but many successes.
    7. Highly successful.

28. To what extent are you able to use Spanish in teaching children?

1. Know no Spanish
2. Can use simple words
3. Can use simple phrases
4. Can carry on a simple conversation
5. Can carry on a moderately difficult conversation
6. Can carry on most conversations
7. Am highly skilled in Spanish

29. In activities outside of school (neighborhood activities, club work, church work, children's activities and groups) I have had experience working with other ethnic groups to this extent.

1. Practically no experience working directly with other ethnic groups.
2. Little experience working directly with other ethnic groups.
3. Considerable experience working directly with other ethnic groups.
4. Much experience working directly with other ethnic groups.
5. Most of my experience has been in direct work with other ethnic groups.

30. At the present time which of the following comes closest to describing your honest feelings as to the usefulness of this summer's Project Headstart.

1. It will have no real usefulness.
2. It will have little real usefulness.
3. It will have some usefulness.
4. I am uncertain as to its usefulness.
5. It will have considerable usefulness.
6. It will have tremendous usefulness.

31. When I think of the problems which we face and then of Project Headstart, I come closest to fitting the following description.

1. Extremely enthusiastic, I'm ready to start now.
2. Highly enthusiastic even if its not perfect.
3. Enthusiastic about Headstart, I'm enthusiastic about many things.
4. Enthusiastic but certainly not overwhelmed by the idea.
5. About "half-way" enthusiastic, maybe I'm too much of a realist.
6. I am greatly interested but should like to know more about it.
7. It may have its good points but I am a "doubting Thomas" at this time.
8. Headstart doesn't have many of the answers and genuine enthusiasm is really hard to generate.
9. I just can't get enthusiastic about it at all.

PERSONNEL SERVICES RESEARCH CENTER
The University of Texas
Austin, Texas

THIS IS A SURVEY NOT A TEST

We need your help. We are evaluating teacher reactions to student behavior. This behavior may or may not be symptomatic of later more serious problems. The items in this questionnaire have been drawn from a pool of statements counselors, principals, and supervisors have reported as having various degrees of undesirability.

Your responses, as professional teachers, in daily contact with the problems of students, will be very helpful to us. Please indicate the degree to which you feel the behavior expressed in these statements is irritating to you.

Use the separate answer sheet to indicate your responses. Please mark the answer in the following way:*

Not at all irritating
1. A===B===C===D===E===
Slightly irritating
1. A===B===C===D===E===
Moderately irritating
1. A===B===C===D===E===
Quite a bit irritating
1. A===B===C===D===E===
Highly irritating
1. A===B===C===D===E===

Thus if the behavior is not irritating to you, fill in the "A" space opposite the item number on the score sheet. If the item is highly irritating, you would mark the "E" space opposite the item number on the score sheet. There are no right or wrong answers. This is a survey not a test. Please be sure you have checked all the items.

*NOTE: PLEASE OBSERVE THAT IN ANSWERING ITEMS YOU PROCEED ACROSS THE ANSWER SHEET. PLEASE USE PENCILS ONLY.

1. Is always tapping foot or drumming fingers.

2. Threatens teacher verbally.

3. Tells smutty jokes.

4. Complains "Nobody loves me."

5. Fails to carry out tasks (School Assignments).

6. Shakes head, looks blank or puzzled, states "I don't know" when words previously understood are spoken to him.

7. Rises in class and opens or closes windows without permiesion.

8. Carves on desk

9. Expresses appreciation of others' acts.

10. Forgets to raise hand to talk but just blurts out.

11. Shoots craps in hall, bathroom.

12. Makes vulgar signs with hands and fingers.

13. Says "Everyone picks on me."

14. Finishes task last, askes for help, makes mistakes.

15. Withdraws, remains quiet, does not talk back when others shove, hit, accuse, or criticize him.

16. Leaves seat to sharpen pencil--walk around room.

17. Makes bets for money with classmates.

18. Expresses delight over the happiness of others (claps hands, says "That's good.")

19. Wiggles and squirms during lecture.

20. Cheats on tests.

21. Passes dirty pictures.

22. Demands "his share," "his rights," and complains of unfairness even when equal shares or privileges have been distributed.

23. Spells poorly.

24. Does not participate in group activities, stays in background.

25. Refuses to conform to ceremonials--flag salute, devotional, etc.

26. Leaves waste paper on floor.

27. Expresses desire to "get ahead", to accomplish, to become great or famous.

28. Bites nails.

29. Lacks cleanliness--"this kid needs a bath".

30. Uses dirty language.

31. Says "You like Billy more"; "You gave him more than you did me."

32. Performs below demonstrated ability.

33. Seems to daydream.

34. Violates class rules.

35. Writes on desk.

36. Discusses own problems with others.

37. Chews on pencil.

38. Walks out during class when ordered to do something.

39. Pulls up girls skirts.

40. States "I'll get even!" "You won't get away with that!" "I'll show him."

41. Says, "I can't do it." "I'm not any good at that." Leaves task when he fails.

42. Looks out of window and just shuts out rest of class and teacher.

43. Consistently complains about grades, questions teacher's grading system.

44. Flips coins in classroom before class starts.

45. States "I'm sorry," "Won't you forgive me" more than others do. (Expresses great remorse, apologizes repeatedly, cries after hurting or telling untruths or destroying property.)

46. Jumps from one activity to next, does not finish tasks.

47. Steals others' belongings.

48. Girls and boys tickling each other.

49. Quits or shows anger when loses.

50. Doesn't take advantage of opportunity when teacher comes before school or stays late to give individual help.

Form 11b1, 2, 3

51. Doesn't participate.

52. Reads library books when assignment is not done.

53. Is careless with school property.

54. Sought out by others, others state they like him; among first selected for teams, etc.

55. Is easily upset by changes in things around him.

56. Lies.

57. Girls who dress "older" than their age group.

58. Says "Others are to blame" for own actions.

59. Doesn't do homework.

60. Fails to sit up straight or pay attention to class discussion.

61. Refuses to go along with class decisions.

62. Is destructive with school property.

63. Acts promptly without grumbling, sometimes does more than asked, states "All right."

64. Has changeable moods.

65. Hurts other children (pinches, hits, kicks or other destructive acts).

66. Plays kissing games.

67. Never shows enthusiasm for school work.

68. Consistently wants to do something differently from the other students

69. Marks on the walls with pencil.

70. Makes everything "just right," always puts things in perfect order (perfectionistic, too neat or clean).

71. Moves constantly, "gets into everything," "swarms all over."

72. Teases other children.

73. Interprets things in suggestive manner.

74. Never studies for tests.

75. Asks to do assignment differently than given.

76. Sticks gum on desks.

77. Expresses worry or concern about bad grades, health, etc.

78. Chatters, keeps talking or interrupting conversation.

79. Pulls other children's hair, punches them, steps on toes.

80. Handles own sex organs.

81. Puts up argument when told he can't do something.

82. Gets school books dirty and torn.

83. Rushes off to do things before instructions are finished, "can't wait."

84. Hits smaller children, "picks on" weaker or smaller children.

85. Writes "dirty things."

86. Erases board when it says "save."

87. Creates unnecessary noise (drops books, shuffles feet.)

88. Becomes "jittery," builds up tensions, becomes "wound up."

89. Fights.

90. Draws "dirty" pictures.

91. Does not take orders when other children are in charge.

92. Stuffs waste paper into desks instead of waste basket.

THE PERSONNEL SERVICES RESEARCH CENTER
The University of Texas
Austin, Texas

Form 19a

NEED FOR ASSISTANCE SCALE

INSTRUCTIONS

For a classroom teacher many situations arise which require decision and action. These situations cover a wide variety of problems in such areas as discipline and motivation. Many of them you handle almost without thinking; others you feel competent to handle but you may require time to consider the best manner of solving them. In still others, you feel a need for assistance from the principal, nurse, counselor, psychologist, or other specially trained personnel.

Listed below are a number of examples of situations and incidents which occur in school. Please indicate, on the separate answer sheet, the extent to which you would want assistance in each case. Assume that appropriately qualified personnel are available. Indicate your response by filling in the spaces after the letter designating your choice according to the following code: *

A. Would seek assistance every time

B. Would seek assistance frequently

C. Would seek assistance occasionally

D. Would seek assistance only rarely

E. Would seek assistance never

EXAMPLE:

If, finding yourself with the following situation in your classroom, you would rarely seek help, you would mark the item as follows:

1. Joey is constantly eating chalk in class.

A====B====C====D**====**E====

*Note: PLEASE USE PENCILS ONLY.

PLEASE OBSERVE THAT IN ANSWERING ITEMS YOU PROCEED ACROSS THE ANSWER SHEET.

Form 19a

1. A fifth grade girl stares out the the window more than she pays attention to anything in class.

2. A child appears flushed after coming in from recess on a warm day.

3. Alice constantly exaggerates and tells untrue stories about her family and experiences.

4. One of the boys in class shoots a spit-wad at one of the others.

5. Jerry is reading below class level and you have no measures of ability for him.

6. Freddie, who is ten, cries every time his mother is a few minutes late in picking him up after school.

7. Bill seems unable to see the blackboard from the back of the room, so you have moved him to the front, but he still has trouble.

8. No matter how you handle Bobby's obvious bids for attention, he continues making demands on you.

9. The entire class is noisy, even after repeated warnings to be quiet.

10. You are teaching a new unit in mathematics and there is material in the curriculum guide with which you are not familiar.

11. You have found a fifth grade boy drawing naked human figures several times.

12. You believe that a sixth grade boy who has been absent is claiming sickness falsely.

13. Greg constantly wiggles and squirms and seems unable to sit quietly.

14. You have tried being patient with Tommy, but he continues to run in the hall, to poke other students, to be loud at the wrong times.

15. George, who is far ahead of the other children in mathematics and reading, loses interest in what is going on and is becoming a behavior problem.

16. A fifth grade child continually writes you love notes and talks about marrying you.

17. Mabel, usually an energetic child, has been lethargic lately but has not complained of being ill.

18. A third grade boy has come to class extremely upset several times and you have heard that his homelife is quite disruptive.

19. The whole class left the room when the bell rang, but before you dismissed them.

20. The children do not seem interested in the new text for social studies, finding it difficult to read.

21. When George cannot have his way, he does not object but becomes very tense and red in the face.

22. Bobbie has been exposed to an infectious disease; she shows no signs of illness and does not want to miss school.

23. Ruth is so shy that she gets sick when asked to give an oral report.

24. You have talked to Frank about cheating on his homework, but he obviously is still copying his assignment from someone else.

25. There are several students in your class who seem very hesitant to speak and any class discussion soon turns into a lecture.

26. A clique of girls in the fourth grade has ostracized Ann, and she has no other friends.

27. Ralph often complains of stomach pains and asked to be excused from strenuous activity, although his parents have noted no health problems on his record.

28. Herman transferred into your class in the middle of the semester and has had difficulty making friends.

29. Ann, a bright but seemingly lazy student, comments loudly after an assignment has been made, "What happens if we dnn't do it?"

30. The children in your class seem unusually bright and are bored by the materials suggested in the curriculum guide.

31. Posey, who is eight, seems mature for her age in most ways, yet continues to talk in a lisping "baby talk."

32. A first grade child has been sent home repeatedly after vomiting spells but always comes back the next day.

33. A fifth grade girl in your class will not sit like a young lady; even after you have talked to her privately, she continues to expose herself unduly.

34. You find the entire class out of their seats when you return to the room after taking a report to the office.

35. This year's class, though average in ability, does not seem to be able to grasp rudimentary grammar.

36. Don, who is in the fourth grade, appears overly concerned with grades and becomes quite depressed when he does not get the highest mark in the class.

37. Billy is a thin, very pale, and listless child who brings a very scanty lunch to school each day.

38. Andrea takes no interest in her school work but spends all her time reading and drawing pictures.

39. Last week, Ralph, who is in the sixth grade, was made to scrub the wall where he had marked it with a pencil; today you find him writing on his desk.

40. An interesting unit you are teaching would be enriched by supplementary materials to which you have no immediate access.

41. Rick is constantly being picked on by the other boys but seems too frightened to stand up and fight back.

42. Larry always seems to have very noticeable sores and bruises on his arms and legs.

43. Alex has an abnormal and morbid fascination with guns and knives, refuses to join other children in sports, and prefers to play war games alone.

44. A little girl uses some swear words out loud in front of the class.

45. It is obvious that several children in the class lack the proper background to move on with the lesson plan you have prepared, however the rest of the class is eager to progress.

46. Gwen is sensitive about a birthmark on her face, refuses to join the other children in any games, and always seems to be trying to hide.

47. Karen explains that she constantly has rashes on her hands and arms because she is "allergic" to so many things.

48. Tom asks to be excused to go to the restroom continually; the other boys have told you that he washes his hands over and over and avoids the other boys for fear of picking up germs.

49. Brett always "drags his feet" and mutters under his breath when asked to do anything.

50. Bill is interested in science and says English is sissy, dampening the enthusiasm of the class for their first experience with poetry.

Form 15a

PERSONNEL SERVICES RESEARCH CENTER
The University of Texas
Austin, Texas

Please indicate the degree to which you agree or disagree with each of the statements on the following pages by responding on the separate answer sheet. Please mark your answer to each item in the following way.*

A.--Agree strongly
B.--Agree in general, but disagree in some specific instances
C.--Undecided
D.--Disagree in general, but agree in a few specific instances
E.--Disagree strongly

Thus, if you "agree strongly" with the item, blacken the space between the dotted lines after "A". If you "disagree strongly" blacken the space found after "E".

*NOTE: PLEASE OBSERVE THAT IN ANSWERING ITEMS YOU PROCEED ACROSS THE ANSWER SHEET. PLEASE USE PENCIL ONLY.

CHILD ATTITUDE SURVEY

1. When you come right down to it, a child is either good or bad and there's not much you can do about it.
2. It is hard to let children go and visit people because they might misbehave when parents or teachers aren't around.
3. With all a child hears on TV and radio and from friends, there's little an adult can do to influence him.
4. If children are quiet for a while you should immediately find out why.
5. Psychologists now know that what a child is born with determines the kind of person he becomes.
6. A mother has a right to know everything going on in her child's life because her child is a part of her.
7. A child may learn to be a juvenile delinquent from playing games like cops and robbers and war too much.
8. A child should be allowed to try out what he can do at times without the parents or teachers watching.
9. Most all children are the same at birth; what happens to them afterwards is important.
10. Parents should make it their business to know everything their children are thinking.
11. There are many things that influence a young child that adults don't understand and can't do anything about.

Form 15a

12. Children must be told exactly what to do and how to do it or they will make mistakes.

13. Many times parents are punished for their own sins through the bad behavior of their children.

14. It is hard to know when to let boys and girls play together where they can't be seen.

15. Most of the bad traits children have (like nervousness or bad temper) are inherited.

16. It is a parent's duty to make sure he knows a child's innermost thoughts.

17. A child that comes from bad stock does not have much chance of amounting to anything.

18. If rules are not closely enforced children will misbehave and get in trouble.

19. Some children are so naturally headstrong that an adult can't really do much about them.

20. More parents should make it their job to know everything their child is doing.

21. Why children behave the way they do is too much for anyone to figure out.

22. An alert parent should try to learn all his child's thoughts.

23. Not even psychologists understand exactly why children act the way they do.

24. Children have a right to activities which do not include their parents.

25. If a child is born bad there's not much you can do about it.

26. Children who are not watched will get into trouble.

27. A child is destined to be a certain kind of person no matter what the parents or teachers do.

28. Children have no right to keep anything from their parents.

29. Some children are just naturally bad.

30. A child should never keep a secret from his parents.

THIS IS A SURVEY NOT A TEST Form 12c

PERSONNEL SERVICES RESEARCH CENTER

The University of Texas

Austin, Texas

Dimensions of Teachers' Opinions

Teachers have a wide variety of experiences in the classroom which enables them to develop realistic knowledge and understanding of children. We recognize individual differences in teachers' opinions and attitudes about what affects children in school. We feel that your insights can be of inestimable value to teacher educators.

Your responses to the following items will permit us to discover how teachers think children are influenced by various classroom occurences. There are no right or wrong answers to the items in this booklet. Our interest is in how teachers' opinions differ on the issues presented in this booklet.

Please indicate the degree to which you agree or disagree with each of the statements on the following pages by responding on the separate answer sheet. Please mark your answer to each item in the following:*

A--Agree rather strongly
B--Agree in general, but disagree in some specific instances
C-- Undecided
D--Disagree in general, but agree in a few specific instances
E--Disagree rather strongly

Thus, if you "Agree rather strongly" with the item, blacken the space between the dotted lines after "A". If you disagree, blacken the space found after "E".

EXAMPLE

1. Children should be seen and not heard.

A===B===C===D===E▬▬

By blackening the space after the E you indicate you disagree rather strongly with the statement.

Please be sure you have responded to all of the items in this survey.

*NOTE: PLEASE OBSERVE THAT IN ANSWERING ITEMS YOU PROCEED ACROSS THE ANSWER SHEET. PLEASE USE PENCILS ONLY.

PERSONNEL SERVICES RESEARCH CENTER Form 12c

Please mark answers according to the explanations on the preceding page, from "A", agree, through "E", disagree.

1. In order to promote pupils' learning of self-discipline, a teacher should never lose emotional control nor speak in anger.

2. Demonstrations of affection by teachers are unnecessary because learning is basically an unemotional experience.

3. Students who have a part in establishing a grading system for their use are less likely to complain than those who do not.

4. Straightforward criticism of his work may effectively motivate a child who is capable of achieving, but who is not doing so.

5. A teacher who tries to give help or direction to an emotionally disturbed student is likely to upset the student even more seriously.

6. Calling on a shy student frequently encourages him to participate.

7. A classroom which is very carefully organized around lectures and detailed assignments tends to reduce the students' intellectual curiosity.

8. Having information about a child from one of his previous teachers, before actually working with that child, will frequently bias the teacher's judgment of him.

9. Praise or criticism should be given to all students according to the same standard, if the teacher is to be respected for fairness.

10. The teacher can often clarify a matter for a pupil and his classmates by rephrasing that pupil's answer to a question.

11. Students can be motivated to work harder by setting up classroom activities with competition among teams selected by ability levels.

12. Subgrouping of large groups is not necessary to meet the needs of most elementary school children.

13. Strong decisive encouragement is all that is necessary to get most shy students to speak up.

14. Protecting the student with emotional difficulties from situations which remind him of his problems helps to prevent these difficulties from becoming more serious.

15. Youngsters in school need to have the limits of situations carefully defined for them, since reasoning with them usually doesn't work very well.

16. The slow learner achieves more when assigned only tasks which he can easily perform.

17. Often a student who learns very poorly in a subject may improve, if only he is given strong encouragement and the sense of security that goes with it.

18. Even undeserved praise will encourage more productive work on the next assignment.

19. Students who are not well liked by classmates need the teacher's help in learning to "get along" with others.

20. Knowing each pupil's name and recognizing his particular achievements, while praiseworthy, does not contribute appreciably to the mental health of the pupils.

21. Students who give glib explanations of their behavior will usually accept the real reasons for it quite readily when the teacher or principal points them out.

22. A student's time should be scheduled carefully so that there are no periods of the day that are wasted in non-productive activity.

23. In order to increase the chances that parents' responses in conferences with the teacher will produce the most constructive effects on the child's behavior and learning, the teacher should consult with the principal before meeting the parents.

24. A common hazard in teaching is that we often have unrealistic expectations for our pupils.

25. In order to learn self-discipline and develop good work habits, students should be made to complete tasks they do not like.

26. An emotionally disturbed pupil is likely to show real improvement, if the classroom teacher gives him advice about what has caused his disturbance and what to do about it.

27. A student may lack the ability to achieve in certain important areas, but, to prevent a severe sense of failure, teachers should discover and encourage him to develop any other talents he may possess.

28. Relatively flexible teaching procedures and assignments tend to produce greater amounts of creative work from pupils.

29. If the very anxious child perceives his teacher as a protector on whom he can depend for security in school, his anxiety will be reduced.

30. The teacher's standards of behavior and academic achievement should be maintained for all pupils in the classroom, even if a few children are thereby made resentful or afraid.

31. The progress of the entire class is likely to be impeded by the presence of children who are considerably below grade level in achievement.

32. A child who is seclusive and isolated from other pupils may be in need of help with emotional problems.

33. So that students will often experience the reward of success, school assignments should generally be easy at first, but they should be made more difficult as students' knowledge and skill increase.

34. A class is more easily controlled if seats are arranged in a regular pattern and each student is assigned a specific seat.

35. If only he can be persuaded that he will do better if he tries harder, a student who seems to lack ability in a certain subject frequently may show a real and lasting improvement in it.

36. If unpopularity with classmates underlies a child's poor learning in school, his teacher should help him develop ways to "get along" better with others.

37. A good teacher can usually get to the bottom of a child's learning or emotional difficulties without the help of counselors, psychologist, physicians, speech therapists, etc.

38. If a student's "nervous tension" arises from fearing the consequences of his actions, it can be reduced by preventing his engaging in wrong actions.

39. Most students respond best to a teacher who defines very firm limits and enforces them fairly.

40. In order to maintain fairness, a poor academic performance must be evaluated as such, regardless of the outside circumstances that might have influenced the student (such as illness or death in the family.)

41. If the teacher does not permit the pupil to give his reasons for a poor academic performance, the pupil may become angry and resentful.

42. Telling a student his behavior is unreasonable or irritating to people with whom he wishes to get along will influence him to control that behavior.

43. Spending classroom time helping students with their everyday problems and their emotional difficulties prevents the teacher from dealing sufficiently with necessary subject matter.

44. When many students are inattentive in class, the teacher may need to evaluate and change the teaching procedures being used.

45. When the teacher carefully organizes and closely controls children's school work the intellectual curiosity and creativity of pupils is likely to increase.

46. If a child appears unable to do the work required of him in the classroom, a careful investigation should be made to find out the reasons.

47. Children differ one from another, but this should not affect the standards on which the teacher criticizes or praises pupil behavior and achievement.

48. A student of high scholastic ability should compete with other students of high ability.

49. Difficult assignments and requirements should be made to almost every pupil so that they will learn that school success comes mainly from hard work and effort.

50. A teacher may help a child to learn better simply by listening sympathetically to his difficulties.

51. A failing student often might improve his performance in a subject, if his teacher could find some way to help him become less anxious, tense, or defiant.

52. Sometimes the teacher can help a troubled child best by enlisting the ideas and continuing assistance of that child's classmates.

53. The best thing a teacher can do for a seclusive, retiring child is to make him stand up to life's demands.

54. Preventing a problem student from doing something he knows is wrong before he actually does it will lessen his nervous tension, because his fears of the consequences of his acts are lessened.

55. A thoroughly orderly, carefully organized, classroom environment gives children a great sense of security.

56. Students who achieve successfully in school are nearly always comfortable with themselves and others.

57. A pupil's anger and resentment, perhaps growing out of a teacher's failure to listen to the child's reasons for a poor academic performance, may cause that pupil to perform poorly again.

58. Let's face it, the teacher usually hasn't the time or the energy to be concerned about children's personal problems and about their school achievement.

59. It is relatively unimportant for the child's welfare that teachers should vary assignments and requirements to fit the different abilities of different children.

60. When a student shows a deep interest and knowledge of one subject, he often seems "odd" to other children.

61. The pupil who is aggressive toward, or defiant of, the teacher should generally be punished for his misconduct.

62. It is important to the emotional welfare of the student that he should know his achievement will be judged by reasonable standards.

63. The teacher should see to it that no pupil has to face unreasonable competition in his schoolwork.

64. If a student really wants to learn and achieve well in school, he can usually do so by putting forth enough effort and hard work.

65. Sympathetic listening by a teacher to a child's personal problems won't usually help the child to better understand his difficulties.

66. A student who says he "just hates" a subject, such as reading or math, may really need the teacher's help in order to understand that his "hate" masks his true fear of failure.

67. In order to create a sound environment for learning, the teacher should generally maintain a relaxed and friendly attitude toward students.

68. The teacher usually can be pretty sure that the child who is always courteous and well-behaved has few, if any, emotional problems to handicap him.

69. A really effective teacher finds ways to cause children to learn well without arousing needless tensions and anxiety in them.

70. The idea that school children can sometimes adequately determine their own aims for learning is nonsense.

71. Students who perform well in class do not need to be complimented since they will be aware of their success.

72. In order to prevent them from developing more serious problems later on, students who experience emotional difficulties or school learning problems should be quickly referred for help to appropriate specialists, such as counselors, in the school system.

73. Every child in the classroom should have clear ideas of what the teacher expects him to do and to accomplish.

74. We should leave the students' personal troubles and behavior to the home and the church, and let the school concentrate on training students' minds.

75. Any school subject can be taught in an intellectually honest way to almost any child, but different ways of teaching it must be developed for different kinds of children, if they are to learn effectively.

76. The student who relies on the more mature judgment of teachers and parents about how much time he should spend in study, and who seeks frequent direction about how to study most effectively, will achieve greater academic success than one who does not.

77. To teach a child really well, the teacher needs to know a great deal more about that child's feelings, interests, and talents than can be learned from his tests and examinations.

78. Keen competition to meet high standards of achievement is emotionally beneficial for every pupil.

79. Many of the school children who seem troubled, anxious, seclusive, or resentful should be made to "measure up" in the regular classroom instead of being given special classes, counseling services, and the like.

80. Clear rules, firmly enforced in the school and classroom, are more effective in maintaining discipline than is reasoning with pupils about their behavior.

81. Most underachievement is caused by laziness on the part of the student.

82. If a shy, retiring child fails to answer when called upon, the teacher should continue to press him until he attempts to respond.

83. When you get right down to essentials, the teacher is the one person who must always determine just what must be learned and how it is to be learned.

84. The teacher's job is to teach his subject; therefore, he should be relatively unconcerned about the students' emotional reactions and personal troubles.

85. Children can't be taught effectively without some thwarting of their individual desires and interests, but such thwarting should be kept to a minimum.

86. The teacher should see to it that every pupil's work is judged by clear standards.

87. One of the most important things a teacher can do for children is to show a serious concern for their emotional well-being.

88. There is little need for the teacher to devise different approaches to teaching a subject to different kinds of children.

89. The student who concentrates instantly on one subject is in danger of becoming too narrow in outlook.

90. Generally, the more information one has about a child's abilities, accomplishments, interests, and problems, the better he can be taught in school.

91. Pupils will often be greatly harmed by being pressed to compete against standards which are very difficult for them to attain.

92. There's been too much overprotective concern for seclusive, passive pupils; they should be made to "face up" to life in school.

93. A regular, carefully arranged, and unchanging classroom seating pattern promotes effective learning better than does a pattern that permits changes in seating according to the nature of the work in progress.

94. Hostility toward his classmates may be a symptom of the child's hostility toward the teacher.

95. Unless you tell school children exactly what to do and how to do it, they tend to become anxious and somewhat tense.

96. Children need to be helped to "feel at ease" in themselves, if they are to learn well in school.

97. If the teacher didn't ignore most of the individual interest and problems of pupils they would often fail to learn what they absolutely should for effective living.

98. The teacher should seek ways of helping individual pupils to cope with their personal tensions and difficulties as well as with their school learning problems.

99. Teachers have been lectured too much about taking individual differences into account, when basically, they should deal with all pupils in much the same way.

100. It doesn't much matter if the teacher has lots of information about the child from tests, home visits, and the like, because such information can't really help the teacher to do a better job.

101. There is entirely too much tendency in our society to expect teachers and other school personnel to pay attention to the emotional problems of pupils.

102. When a child tells the teacher about his personal troubles, the teacher should give him clear, specific advice and how to deal with them.

103. Children who tend to be discourteous and rowdy in school often need help to clear up difficult emotional problems.

104. If they expect children to learn well in school, teachers should give them help in understanding their worries, fears, and resentments.

105. A teacher who wants to do an effective job must generally allow children's own desires and interests to enter into their learning to a marked degree.

106. If a troubled child tells the teacher of his worries, fears, and resentments, the teacher should try to "dig out" and explain the true reasons for them.

107. If these pupils who have emotional difficulties would just get down to bueiness in school, most of their troubles would clear up.

108. Every pupil should be helped to realize clearly that the teacher is concerned about him as a person regardless of how well he behaves and achieves in school.

109. Even though many of a child's problems, fears, worries, and the like might seem unimportant to most adults, the teacher should take them seriously until they are proved to be insignificant.

110. Most school children's emotional difficulties are pretty superficial and insignificant.

Form 25

NAME______________________________ Sex____________________

SCHOOL DISTRICT____________

CLASSIFICATION
OF SCHOOL DISTRICT
(Circle one) (4A, 3A, 2A, 1A, B.)

TEACHER'S SURVEY FORM

SECTION A

1. What was your major in college?

373	1. Elementary education
9	2. Secondary education
2	3. Physical education
2	4. Art or music (education)
17	5. Social Studies
22	6. English
0	7. Math or science
19	8. Home Economics or related area
29	9. Other:________________

2. How long have you been a teacher?

23	1. This is my first year
99	2. 1 to 5 years
90	3. 6 to 10 years
73	4. 11 to 15 years
51	5. 16 to 20 years
36	6. 21 to 25 years
43	7. 26 to 30 years
29	8. 31 to 35 years
29	9. 36 to 40 years
-	10. 40 years or more

3. Your present age in years:

3	0. No response
62	1. 21-25 years
53	2. 26-30 years
66	3. 31=35 years
42	4. 36-40 years
44	5. 41-45 years
50	6. 46-50 years
59	7. 51-55 years
60	8. 56-60 years
34	9. 61-65 years
-	10. Other:______years (Please specify)

4. How many years have you taught primarily Anglo children?

14	0. No response
201	1. None
33	2. 1 year
25	3. 2 years
15	4. 3 years
13	5. 4 years
24	6. 5 years
39	7. 6-9 years
38	8. 10-14 years
71	9. 15 years or longer

5. How many years have you taught primarily Negro children?

12	0. No response
323	1. Nono
11	2. 1 year
16	3. 2 years
8	4. 3 years
12	5. 4 years
6	6. 5 years
26	7. 6-9 years
18	8. 10-14 years
41	9. 15 years or longer

6. How many years have you taught primarily Latin-American children?

15	0. No response
194	1. None
32	2. 1 year
19	3. 2 years
17	4. 3 years
18	5. 4 years
13	6. 5 years
60	7. 6-9 years
47	8. 10-14 years
58	9. 15 years or longer

7. To which ethnic or racial group do you belong? (Omit this question if you would prefer not to answer)

20	0. No response
114	1. Negro
64	2. Latin-American
270	3. Anglo
5	4. Other:________________________

8. Your present marital status:

2	0.
80	1. Single
319	2. Married
3	3. Seperated
24	4. Divorced
41	5. Widowed
4	6. Remarried

9. How many children do you have?

6	0.
191	1. None
97	2. One
99	3. Two
45	4. Three
23	5. Four
8	6. Five
4	7. Six or more

10. Typical kind of community in which you lived longest as a child:

7	0.
119	1. Rural or farm
20	2. Less than 500 people
71	3. 500-2500 people
63	4. 2501-7500 people
28	5. 7501-10,000 people
36	6. 10,001-25,000 people
42	7. 25,001-100,000 people
55	8. 100,001-500,000 people
32	9. More than 500,000 people

SECTION B. Some Questions About Children in your Classroom

11. If you were having educational visitors to your classroom, and had been asked to select three students to demonstrate what the class has really been learning this year, which three of your students would you select? (Write their names on the lines below.)

100 0. ______________________________

103 1. ______________________________

137 2. ______________________________

133 3. ______________________________

12. If you selected the three students in your class whom you think might not finish High School, which three students would you select? (Write their names on the lines below.)

____

____

____

13. If you were making nominations for the "best examples of intellectual curiosity" in your class, which three students would you select? (Write their names on the lines below.)

____

____

____

SECTION C

IN YOUR PRESENT CLASSROOM YOU ARE TEACHING SOME CHILDREN WHO TOOK PART IN LAST SUMMER'S HEAD START PROGRAM AND OTHER CHILDREN FROM SIMILAR ENVIRONMENTS WHO DID NOT TAKE PART IN HEAD START.

WE WOULD LIKE YOU TO GIVE US YOUR BEST JUDGMENT AS TO HOW THE HEAD START CHILDREN COMPARE IN SEVERAL AREAS WITH SIMILAR CHILDREN IN YOUR CLASS WHO DID NOT HAVE HEAD START EXPERIENCES, AT THE PRESENT TIME.

14. In social relationships with their classmates, how do your Head Start children compare with non-Head Start children? (Circle one choice)

16 0.
170 1. Head Start children relate to classmates much better than similar non-Head Start children.
149 2. Head Start children relate to classmates somewhat better than similar non-Head Start children.
132 3. Head Start children relate to classmates about the same as similar non-Head Start children.
5 4. Head Start children relate to classmates somewhat less well than similar non-Head Start children.
1 5. Head Start children relate to classmates much less well than similar non-Head Start children.

15. In relationships with teachers, Head Start children get along:

15 0.
152 1. Much better than similar non-Head Start children.
153 2. Somewhat better than similar non-Head Start children.
142 3. About the same as similar non-Head Start children.
9 4. Somewhat less well than similar non-Head Start children.
2 5. Much less well than similar non-Head Start children.

16. In being "ready for school," Head Start children were:

17 0.
231 1. Much more ready for school than similar non-Head Start children.
155 2. Somewhat more ready for school than similar non-Head Start children.
62 3. About as ready for school as similar non-Head Start children.
5 4. Somewhat less ready for school than similar non-Head Start children.
3 5. Much less ready for school than similar non-Head Start children.

17. Head Start children appear to like school:

16 0.
134 1. Much better than non-Head Start children.
151 2. Somewhat better than non-Head Start Children.
166 3. About the same as non-Head Start children.
5 4. Somewhat less than non-Head Start children.
1 5. Much less than non-Head Start children.

18. Head Start children seem to be extroverted (less shy):

18 0.
196 1. Much more than non-Head Start children.
139 2. Somewhat more than non-Head Start children.
91 3. About as much as similar non-Head Start children.
18 4. Somewhat less than non-Head Start children.
11 5. Much less than non-Head Start children.

19. Head Start children seem to be able to share with others:

18 0.
118 1. Much better than similar non-Head Start children.
159 2. Somewhat better than non-Head Start children.
174 3. About the same as non-Head Start children.
2 4. Somewhat less well than non-Head Start children.
2 5. Much less well than non-Head Start children.

20. In completing learning tasks, Head Start children try:

17 0.
83 1. Much harder than non-Head Start children.
181 2. Somewhat harder than non-Head Start children.
177 3. About the same as non-Head Start children.
11 4. Somewhat less harder than non-Head Start children.
4 5. Much less harder than non-Head Start children.

21. Are Head Start children more or less secure in school (i.e., less anxious about school than non-Head Start children)?

16 0.
189 1. Much more secure than similar non-Head Start children.
158 2. Somewhat more secure than non-Head Start children.
103 3. About the same as non-Head Start children.
4 4. Somewhat less secure than non-Head Start children.
5 5. Much less secure than non-Head Start children.

22. Head Start children seem to be frustrated:

19 0.
7 1. Much more than similar non-Head Start children.
18 2. Somewhat more than non-Head Start children.
137 3. About the same as non-Head Start children.
163 4. Somewhat less than non-Head Start children.
129 5. Much less than non-Head Start children.

23. Head Start children seem to control their feelings:

17 0.
77 1. Much better than similar non-Head Start children.
153 2. Somewhat better than non-Head Start children.
203 3. About the same as non-Head Start children.
20 4. Somewhat less well than non-Head Start children.
3 5. Much less well than non-Head Start children.

24. Do Head Start children seem to be more or less aggressive than similar non-Head Start children?

18	0.
95	1. Much more aggressive than similar non-Head Start children.
196	2. Somewhat more aggressive than non-Head Start children.
130	3. About the same as non-Head Start children.
22	4. Somewhat less aggressive than non-Head Start children.
12	5. Much less aggressive than non-Head Start children.

25. Are Head Start children easier to control than non-Head Start children?

19	0.
93	1. Much easier to control than similar non-Head Start children.
123	2. Somewhat easier than non-Head Start children.
174	3. About the same as non-Head Start children.
46	4. Somewhat less easy than non-Head Start children.
18	5. Much less easy to control than non-Head Start children.

26. Head Start children follow instructions:

14	0.
155	1. Much better than similar non-Head Start children.
170	2. Somewhat better than non-Head Start children.
112	3. About the same as non-Head Start children.
15	4. Somewhat less well than non-Head Start children.
7	5. Much less well than non-Head Start children.

27. What kind of opinion do Head Start children have of themselves?

18	0.
125	1. Much better (self-respecting) than similar non-Head Start children.
181	2. Somewhat better than similar non-Head Start children.
146	3. About the same as similar non-Head Start children.
3	4. Somewhat less good than similar non-Head Start children.
	5. Much less good than similar non-Head Start children.

28. How easily do Head Start children learn to read as compared with similar non-Head Start children?

17	0.
103	1. Much more easily
188	2. Somewhat more easily
153	3. About as easily
8	4. Somewhat less easily
4	5. Much less easily than similar non-Head Start children.

29. Compared with non-Head Start children from similar backgrounds, do Head Start children show a greater degree of reading comprehension?

17	0.
89	1. Much greater
205	2. Somewhat greater
153	3. About the same
5	4. Somewhat less comprehension than similar non-Head Start children.
4	5. Much less than similar non-Head Start children.

30. To what extent do Head Start children show knowledge and comprehension of numbers?

16	0.
101	1. Much more than similar non-Head Start children.
209	2. Somewhat more than similar non-Head Start children.
135	3. About the same as similar non-Head Start children.
11	4. Somewhat less than similar non-Head Start children.
1	5. Much less than similar non-Head Start children.

31. Head Start children show accurate color recognition ability:

18	0.
178	1. Much more than similar non-Head Start children.
173	2. Somewhat more than similar non-Head Start children.
99	3. About the same as similar non-Head Start children.
3	4. Somewhat less than similar non-Head Start children.
2	5. Much less than similar non-Head Start children.

32. Head Start children use appropriate colors in work with crayons:

20	0.
146	1. Much more than similar non-Head Start children.
176	2. Somewhat more than non-Head Start children.
125	3. About the same as non-Head Start children.
5	4. Somewhat less than non-Head Start children.
1	5. Much less than similar non-Head Start children.

33. Head Start children exhibit the ability to think logically:

24	0.
66	1. Much more than similar non-Head Start children.
196	2. Somewhat more than non-Head Start children.
176	3. About the same as non-Head Start children.
7	4. Somewhat less than non-Head Start children.
4	5. Much less than similar non-Head Start children.

34. Head Start children know common household and classroom objects: (i.e., plate, knife, toilet, paper, scissors, pencil, et al.).

19 0.
213 1. Much more than similar non-Head Start children.
124 2. Somewhat more than similar non-Head Start children.
114 3. About the same as similar non-Head Start children.
3 4. Somewhat less than similar non-Head Start children.
5. Much less than similar non-Head Start children.

35. Head Start children exhibit proper use of common objects:

17 0.
157 1. Much more than similar non-Head Start children.
173 2. Somewhat more than similar non-Head Start children.
124 3. About the same as similar non-Head Start children.
2 4. Somewhat less than similar non-Head Start children.
5. Much less than similar non-Head Start children.

36. Head Start children are able to recognize different geometric shapes:

18 0.
168 1. Much better than similar non-Head Start children.
165 2. Somewhat better than similar non-Head Start children.
116 3. About the same as similar non-Head Start children.
4 4. Somewhat less well than similar non-Head Start children.
2 5. Much less well than similar non-Head Start children.

37. Head Start children utilize concepts like small; bit; up-down; tall-short; etc.

17 0.
145 1. Much more adequately than similar non-Head Start children.
178 2. Somewhat more adequately than similar non-Head Start children.
128 3. About the same as similar non-Head Start children.
2 4. Somewhat less adequately than similar non-Head Start children.
3 5. Much less adequately than similar non-Head Start children.

SECTION D

38. How much experience have you had teaching the kinds of children who were in Project Head Start in the Summer of 1965?

14	0.
47	1. No experience
51	2. 1 year of experience
28	3. 2 years of experience
24	4. 3 years of experience
25	5. 4 years of experience
32	6. 5 years of experience
74	7. 6-9 years of experience
65	8. 10-14 years of experience
113	9. 15 or more years of experience

39. Did you participate in the Summer Head Start Project? YES NO

40. How well do you feel that you really identify yourself with so-called "culturally deprived" children?

9	0.
1	1. I find it almost impossible to identify with such children.
2	2. I try to help them but find it extremely hard to understand the attitudes, ideas, and ways of living of these people.
12	3. I try to understand these people but often find that I don't.
26	4. If I study them carefully, I find that I can really begin to understand and accept them.
12	5. At times I can identify with them, but just as often I can't.
66	6. I find that I usually understand and accept their attitudes, behaviors, and way of living.
194	7. I can accept the culturally deprived, communicate with them, and, usually, I am accepted by them--I believe I understand.
43	8. I feel that I usually can identify with these children; it's not a matter of thinking but of feeling.
108	9. I feel that I identify closely most of the time with these children.

41. To what extent do you feel that the 1965 Summer Head Start Program covered the things it should have covered?

42	0.
55	1. It covered everything it should have included.
167	2. It covered almost everything which should have been included.
197	3. It covered many things which should have been included, but it left some things out.
11	4. It left out more things that should have been covered than it included.
1	5. It covered nothing which should have been covered.

42. If you feel more emphasis was needed in certain areas in the 1965 Summer Head Start Project, please indicate which ones. (Please do not circle more than three (3) items.)

42 1. Reading readiness
43 2. Number concepts
44 3. Use of colors
45 4. Familiarization with classroom objects and their uses (paste, scissors, et al.).
46 5. Familiarization with typical objects found in the average home (middle class).
47 6. How to share with others
48 7. How to follow instructions
49 8. How to get along better with peers
50 9. How to get along better with adults
59 Other suggestions?

AT THIS POINT PLEASE TURN BACK TO SECTION B, ITEMS 14, 15, 16. PLACE THE LETTERS HS IN FRONT OF THE NAMES OF THOSE PUPILS YOU LISTED WHO WERE IN THE 1965 HEAD START PROJECT. PLACE THE LETTERS NHS IN FRONT OF THOSE PUPILS' NAMES WHO WERE NOT IN THE 1965 SUMMER HEAD START PROJECT!